

09/711, 782✓

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(FILE 'HOME' ENTERED AT 09:47:13 ON 31 MAR 2003)

FILE 'BIOSIS, MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 09:50:26 ON 31 MAR 2003

L1 863 S SILANIZED SILICA  
L2 43 S L1 AND SOLID SUPPORT  
L3 1 S L2 AND CLEARING  
L4 13 S L2 AND SILICA (3A) (MATRIX OR SOLID SUPPORT)  
L5 13 DUP REM L4 (0 DUPLICATES REMOVED)  
L6 0 S L2 AND ISOLAT? (3A) BIOLOGI?  
L7 6 S L2 AND ISOLATING  
L8 6 DUP REM L7 (0 DUPLICATES REMOVED)  
L9 0 S L8 AND CHAOTROP?  
L10 37 S L2 NOT L8  
L11 8 S L10 AND BIOLOGICAL  
L12 5 S L11 AND SALT  
L13 0 S L12 AND CHAOTROP?  
L14 0 S L11 AND IODIDE  
L15 0 S L11 AND PERCHLORATE  
L16 2 S L11 AND GUANIDINIUM  
L17 6 S L11 NOT L16  
L18 0 S L17 AND TRICHLOROACETATE  
L19 2 S L1 AND SILANE LIGANDS  
L20 0 S L1 AND SLIANE  
L21 112 S L1 AND SILANE  
L22 2 S L21 AND CHAOTROPIC SALT?

=> s l21 not l22

L23 110 L21 NOT L22

=> s l23 and chaotrop?

L24 3 L23 AND CHAOTROP?

=> d l24 bib abs 1-3

L24 ANSWER 1 OF 3 USPATFULL  
AN 2002:230607 USPATFULL  
TI Polymerized staphylococcal protein a for treatment of diseases  
IN Terman, David Stephen, Pebble Beach, CA, United States  
Reiser, Raoul F., Sarasota, FL, United States  
PA Terman, David S., Pebble Beach, CA, United States (U.S. individual)  
PI US 6447777 B1 20020910  
AI US 1997-828951 19970328 (8)  
PRAI US 1996-24802P 19960329 (60)  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Minnifield, Nita  
LREP Bortner, Scott R  
CLMN Number of Claims: 29  
ECL Exemplary Claim: 1  
DRWN 9 Drawing Figure(s); 9 Drawing Page(s)  
LN.CNT 3099  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB Polymers and polymer conjugates comprising crosslinked Staphylococcal protein A, or crosslinked protein A-superantigen, or crosslinked functional derivatives thereof ranging in size from 12kDa to 10,000kDa are useful in the treatment of autoimmune diseases, such as rheumatoid arthritis and ITP as well as neoplastic diseases. Compositions and pharmaceutical composition comprising chemically crosslinked polymers of

protein A alone or protein A and bacterial enterotoxins, optionally further complexed with immunoglobulins and complement components, are disclosed, as are methods for making and using these compositions in the treatment of diseases. Plasma perfusates of protein A immunadsorbent columns in clinical use are shown to act through the leaching of polymers of protein A and protein A-Staphylococcal enterotoxin B having a broad range of molecular masses. Methods of treating patients by monitoring column plasma perfusates for either of these chemical entities and appropriately adjusting doses of perfusate are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L24 ANSWER 2 OF 3 USPATFULL

AN 90:38391 USPATFULL  
 TI Method of purifying bioactive substances by biospecific adsorption  
 IN Schneider, Michel, Troinex, Switzerland  
 Guillot, Christian, Saint-Julien en Genevois, France  
 Lamy, Bernard, Carouge, Switzerland  
 PA Battelle Memorial Institute, Geneva, Switzerland (non-U.S. corporation)  
 PI US 4925818 19900515  
 AI US 1988-252994 19881004 (7)  
 RLI Division of Ser. No. US 1987-23861, filed on 5 Feb 1987, now patented,  
 Pat. No. US 4824578, issued on 25 Apr 1989  
 PRAI CH 1985-2436 19850610  
 DT Utility  
 FS Granted  
 EXNAM Primary Examiner: Garvin, Patrick P.  
 LREP Cushman, Darby and Cushman  
 CLMN Number of Claims: 7  
 ECL Exemplary Claim: 1  
 DRWN No Drawings  
 LN.CNT 642

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A ligand specific to a bioactive substance to be purified is fixed, via a connecting **silane**, to a mineral particulate carrier chosen from among SiO.sub.2, Al.sub.2 O.sub.3, ZrO.sub.2 and TiO.sub.2, the particles of the carrier being submicronic, non-porous and having a large specific surface. The carrier is contacted with an aqueous extract containing inter alia the bioactive substances, for the time required for the substance to become specifically fixed to the carrier. The carrier is then separated and the desired bioactive substance is isolated by desorption.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L24 ANSWER 3 OF 3 USPATFULL

AN 89:32012 USPATFULL  
 TI Method of purifying bioactive substances by biospecific adsorption  
 IN Schneider, Michel, Troinex, Switzerland  
 Guillot, Christian, Saint-Julien en Genevois, France  
 Lamy, Bernard, Carouge, Switzerland  
 PA Battelle Memorial Institute, Geneva, Switzerland (non-U.S. corporation)  
 PI US 4824578 19890425  
 WO 8607281 19861218  
 AI US 1987-23861 19870205 (7)  
 WO 1986-CH81 19860604  
 19870205 PCT 371 date  
 19870205 PCT 102(e) date  
 PRAI CH 1985-2436 19850610  
 DT Utility  
 FS Granted

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EXNAM Primary Examiner: Cintins, Ivars

LREP Cushman Darby & Cushman

CLMN Number of Claims: 3

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 623

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A ligand specific to a bioactive substance to be purified is fixed, through a connecting **silane**, to a mineral particulate carrier chosen from among  $\text{SiO}_2$ ,  $\text{Al}_2\text{O}_3$ ,  $\text{ZrO}_2$  and  $\text{TiO}_2$ , the particles of the carrier being submicronic, non-porous and having a large specific surface. The carrier is contacted with an aqueous extract containing the bioactive substances, for the time required for the substance to become specifically fixed to the carrier. The carrier is then separated and the desired bioactive substance is isolated by desorption.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

~~0-507063~~  
FILE 'HOME' ENTERED AT 09:47:13 ON 31 MAR 2003

=> file biosis medline caplus wpids uspatfull  
COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
1.05	1.05

FULL ESTIMATED COST

FILE 'BIOSIS' ENTERED AT 09:50:26 ON 31 MAR 2003  
COPYRIGHT (C) 2003 BIOLOGICAL ABSTRACTS INC.(R)

FILE 'MEDLINE' ENTERED AT 09:50:26 ON 31 MAR 2003

FILE 'CAPLUS' ENTERED AT 09:50:26 ON 31 MAR 2003  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
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FILE 'WPIDS' ENTERED AT 09:50:26 ON 31 MAR 2003  
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FILE 'USPATFULL' ENTERED AT 09:50:26 ON 31 MAR 2003  
CA INDEXING COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

\*\*\* YOU HAVE NEW MAIL \*\*\*

=> s silanized silica  
L1 863 SILANIZED SILICA

=> s l1 and solid support  
L2 43 L1 AND SOLID SUPPORT

=> s l2 and clearing  
L3 1 L2 AND CLEARING

=> d l3 bib abs

L3 ANSWER 1 OF 1 USPATFULL  
AN 2003:70919 USPATFULL  
TI Individualization of therapy with gastroesophageal reflux disease agents  
IN Leyland-Jones, Brian, Miami, FL, UNITED STATES  
PA McGill University, Montreal, CANADA (U.S. corporation)  
PI US 2003049204 A1 20030313  
AI US 2002-132080 A1 20020424 (10)  
PRAI US 2001-285687P 20010424 (60)  
DT Utility  
FS APPLICATION  
LREP HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX  
9133, CONCORD, MA, 01742-9133  
CLMN Number of Claims: 83  
ECL Exemplary Claim: 1  
DRWN 23 Drawing Page(s)  
LN.CNT 5184  
AB The invention relates to the individualization of therapy on the basis  
of a phenotypic profile of an individual. More specifically, the present  
invention relates to the use of metabolic phenotyping for the  
individualization of treatment with GERD agents.

=> d l3 kwic

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L3 ANSWER 1 OF 1 USPATFULL

DETD . . . GERD because of the loss of the contribution of the crural diaphragm to the antireflux barrier and because of ineffective **clearing** of acid trapped in the distal esophagus. Delayed gastric emptying may also contribute to GERD. The composition of the refluxate. . .

DETD . . . the Fc part of the antibody, e.g., the biotin residue on the Fc binds to surface-coated streptavidin; coupling to the **solid support** via an oxidized carbohydrate moiety on the C2 Fc domain; and the binding of Fab or scFv fragments to the. . .

DETD . . . the immobilization onto solid surfaces. Defined linkages between the antibody or its carbohydrate moieties and the solid phase material (silica, **silanized silica**, Ta- or Ti-oxides, plastics, sepharose, and metal films) are being built by glutaraldehyde, carbodiimide, uccinimide ester, maleinimide, periodate or galactose. . .

=> s l2 and silica (3a) (matrix or solid support)

L4 13 L2 AND SILICA (3A) (MATRIX OR SOLID SUPPORT)

=> dup rem l4

PROCESSING COMPLETED FOR L4

L5 13 DUP REM L4 (0 DUPLICATES REMOVED)

=> d l5 bib abs 1-13

L5 ANSWER 1 OF 13 USPATFULL

AN 2002:113023 USPATFULL

TI Supported group 8-10 transition metal Olefin polymerization catalysts

IN Mackenzie, Peter Borden, Kingsport, TN, UNITED STATES

Moody, Leslie Shane, Johnson City, TN, UNITED STATES

Killian, Christopher Moore, Gray, TN, UNITED STATES

Lavoie, Gino Georges, Kingsport, TN, UNITED STATES

PI US 2002058768 A1 20020516

AI US 2001-984620 A1 20011030 (9)

RLI Continuation of Ser. No. US 2000-579793, filed on 26 May 2000, PENDING  
Continuation-in-part of Ser. No. US 1998-177099, filed on 22 Oct 1998,  
GRANTED, Pat. No. US 6103658 Continuation-in-part of Ser. No. US  
1998-88223, filed on 1 Jun 1998, ABANDONED Continuation-in-part of Ser.  
No. US 1998-30058, filed on 24 Feb 1998, ABANDONED

PRAI US 1997-62609P 19971022 (60)

US 1997-40363P 19970310 (60)

US 1997-41542P 19970325 (60)

US 1997-42925P 19970404 (60)

US 1997-43406P 19970404 (60)

US 1997-44691P 19970418 (60)

US 1997-59372P 19970918 (60)

DT Utility

FS APPLICATION

LREP Nhat D. Phan, Esq., BURNS, DOANE, SWECKER & MATHIS, L.L.P., P.O. Box  
1404, Alexandria, VA, 22313-1404

CLMN Number of Claims: 47

ECL Exemplary Claim: 1

DRWN 1 Drawing Page(s)

LN.CNT 4171

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods for preparing olefin polymers, and catalysts for preparing  
olefin polymers are disclosed. The polymers can be prepared by  
contacting the corresponding monomers with a Group 8-10 transition metal  
catalyst and a **solid support**. The polymers are

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suitable for processing in conventional extrusion processes, and can be formed into high barrier sheets or films, or low molecular weight resins for use in synthetic waxes in wax coatings or as emulsions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 2 OF 13 USPATFULL  
AN 2002:61195 USPATFULL  
TI Catalyst compositions for the polymerization of olefins  
IN Ponasik, Jr., James Allen, Kingsport, TN, UNITED STATES  
McDevitt, Jason Patrick, Wake Forest, NC, UNITED STATES  
Killian, Christopher Moore, Gray, TN, UNITED STATES  
Mackenzie, Peter Borden, Kingsport, TN, UNITED STATES  
Moody, Leslie Shane, Johnson City, TN, UNITED STATES  
PI US 2002035030 A1 20020321  
AI US 2001-776984 A1 20010205 (9)  
RLI Division of Ser. No. US 1998-222614, filed on 29 Dec 1998, GRANTED, Pat. No. US 6200925 Continuation-in-part of Ser. No. US 1998-28315, filed on 24 Feb 1998, ABANDONED  
PRAI US 1997-40754P 19970313 (60)  
US 1997-44691P 19970418 (60)  
US 1997-45337P 19970501 (60)  
US 1997-45358P 19970502 (60)  
US 1997-45357P 19970502 (60)  
US 1997-45697P 19970506 (60)  
DT Utility  
FS APPLICATION  
LREP Kilpatrick Stockton LLP, Bernard J. Graves, Jr., Esquire, 3500 One First Union Center, 301 South College Street, Charlotte, NC, 28202-6001  
CLMN Number of Claims: 44  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 2262

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention includes novel ligands which may be utilized as part of a catalyst system. A catalyst system of the present invention is a transition metal-ligand complex. In particular, the catalyst system includes a transition metal component and a ligand component comprising a Nitrogen atom and/or functional groups comprising a Nitrogen atom, generally in the form of an imine functional group. In certain embodiments, the ligand component may further comprise a phosphorous atom. Preferred ligand components are bidentate (bind to the transition metal at two or more sites) and include a nitrogen-transition metal bond. The transition metal-ligand complex is generally cationic and associated with a weakly coordinating anion.

A catalyst system of the present invention may further comprise a Lewis or Bronsted acid. The Lewis or Bronsted acid may be complexed with the ligand component of the transition metal-ligand complex,

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 3 OF 13 USPATFULL  
AN 2001:165797 USPATFULL  
TI Catalyst compositions for the polymerization of olefins  
IN Ponasik, James Allen, JR., Kingsport, TN, United States  
McDevitt, Jason Patrick, Wake Forest, NC, United States  
Killian, Christopher Moore, Gray, TN, United States  
Mackenzie, Peter Borden, Kingsport, TN, United States  
Moody, Leslie Shane, Johnson City, TN, United States  
PI US 2001025007 A1 20010927  
US 6372682 B2 20020416

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AI US 2001-780093 A1 20010209 (9)  
RLI Continuation of Ser. No. US 1998-222614, filed on 29 Dec 1998, GRANTED,  
Pat. No. US 6200925 Continuation-in-part of Ser. No. US 1998-28315,  
filed on 24 Feb 1998, ABANDONED  
PRAI US 1997-40754P 19970313 (60)  
US 1997-44691P 19970418 (60)  
US 1997-45337P 19970501 (60)  
US 1997-45358P 19970502 (60)  
US 1997-45357P 19970502 (60)  
US 1997-45697P 19970506 (60)  
DT Utility  
FS APPLICATION  
LREP Bernard J. Graves, Jr., KILPATRICK STOCKTON LLP, 3500 One First Union  
Center, 301 South College Street, Charlotte, NC, 28202-6001  
CLMN Number of Claims: 44  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 2228

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention includes novel ligands which may be utilized as  
part of a catalyst system. A catalyst system of the present invention is  
a transition metal--ligand complex. In particular, the catalyst system  
includes a transition metal component and a ligand component comprising  
a Nitrogen atom and/or functional groups comprising a Nitrogen atom,  
generally in the form of an imine functional group. In certain  
embodiments, the ligand component may further comprise a phosphorous  
atom. Preferred ligand components are bidentate (bind to the transition  
metal at two or more sites) and include a nitrogen--transition metal  
bond. The transition metal--ligand complex is generally cationic and  
associated with a weakly coordinating anion.

A catalyst system of the present invention may further comprise a Lewis  
or Bronsted acid. The Lewis or Bronsted acid may be complexed with the  
ligand component of the transition metal-ligand complex.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 4 OF 13 USPATFULL  
AN 2001:134197 USPATFULL  
TI Group 8-10 transition metal olefin polymerization catalysts  
IN Mackenzie, Peter Borden, Kingsport, TN, United States  
Killian, Christopher Moore, Gray, TN, United States  
Moody, Leslie Shane, Johnson City, TN, United States  
McDevitt, Jason Patrick, Wake Forest, NC, United States  
PI US 2001014646 A1 20010816  
AI US 2001-796444 A1 20010302 (9)  
RLI Division of Ser. No. US 1999-226116, filed on 7 Jan 1999, GRANTED, Pat.  
No. US 6245871 Continuation-in-part of Ser. No. US 1998-28316, filed on  
24 Feb 1998, ABANDONED  
PRAI US 1997-44691P 19970418 (60)  
US 1997-45333P 19970501 (60)  
US 1997-45355P 19970502 (60)  
DT Utility  
FS APPLICATION  
LREP B. Jefferson Boggs, Jr., BURNS, DOANE, SWECKER & MATHIS, L.L.P., P.O.  
Box 1404, Alexandria, VA, 22313-1404  
CLMN Number of Claims: 176  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 1704

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Provided are certain transition metal complexes which are useful as

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catalysts in the polymerization of olefinic monomers. In particular, the invention provides complexes of certain bidentate ligands bonded to Ni, Pd, Co, or Fe, and optionally, one or more neutral Lewis acids, and their use in the polymerization of olefins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 5 OF 13 USPATFULL  
AN 2001:179209 USPATFULL  
TI Olefin polymerization catalysts containing group 8-10 transition metals, processes employing such catalysts and polymers obtained therefrom  
IN Mackenzie, Peter Borden, Kingsport, TN, United States  
Moody, Leslie Shane, Johnson City, TN, United States  
Killian, Christopher Moore, Gray, TN, United States  
Ponasik, Jr., James Allen, Kingsport, TN, United States  
McDevitt, Jason Patrick, Wake Forest, NC, United States  
Lavoie, Gino Georges, Kingsport, TN, United States  
PA Eastman Chemical Company, Kingsport, TN, United States (U.S. corporation)  
PI US 6303720 B1 20011016  
AI US 2000-570222 20000512 (9)  
RLI Division of Ser. No. US 1998-177099, filed on 22 Oct 1998, now patented, Pat. No. US 6103658 Continuation-in-part of Ser. No. US 1998-88223, filed on 1 Jun 1998, now abandoned Continuation-in-part of Ser. No. US 1998-30058, filed on 24 Feb 1998, now abandoned  
PRAI US 1997-62609P 19971022 (60)  
US 1997-40363P 19970310 (60)  
US 1997-41542P 19970325 (60)  
US 1997-42925P 19970404 (60)  
US 1997-43406P 19970404 (60)  
US 1997-44691P 19970418 (60)  
US 1997-59372P 19970918 (60)  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Wu, David W.; Assistant Examiner: Harlan, R.  
LREP Wood, Jonathan D., Graves, Jr., Bernard J.  
CLMN Number of Claims: 191  
ECL Exemplary Claim: 18  
DRWN No Drawings  
LN.CNT 4744

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods for preparing olefin polymers, and catalysts for preparing olefin polymers are disclosed. The polymers can be prepared by contacting the corresponding monomers with a Group 8-10 transition metal catalyst. The polymers are suitable for processing in conventional extrusion processes, and can be formed into high barrier sheets or films, or low molecular weight resins for use in synthetic waxes in wax coatings or as emulsions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 6 OF 13 USPATFULL  
AN 2001:142436 USPATFULL  
TI Olefin oligomerization and polymerization catalysts  
IN Lavoie, Gino Georges, Kingsport, TN, United States  
Ponasik, Jr., James Allen, Kingsport, TN, United States  
Killian, Christopher Moore, Gray, TN, United States  
Moody, Leslie Shane, Johnson City, TN, United States  
Mackenzie, Peter Borden, Kingsport, TN, United States  
PA Eastman Chemical Company, Kingsport, TN, United States (U.S. corporation)  
PI US 6281303 B1 20010828



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AI US 1999-361752 19990727 (9)  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Wu, David W.; Assistant Examiner: Harlan, R.  
LREP Wood, Jonathan D., Graves, Jr., Bernard J.  
CLMN Number of Claims: 34  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 973

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed herein are compounds and processes useful for the oligomerization and polymerization of olefins. Transition metal catalyst complexes of groups 7 through 10 with tridentate ligands are described, along with a representative polymerization of ethylene using one of the cobalt complexes. The transition metal complexes of the invention may also be attached to a **solid support** and used in gas phase processes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 7 OF 13 USPATFULL  
AN 2001:86572 USPATFULL  
TI Group 8-10 transition metal olefin polymerization catalysts  
IN Mackenzie, Peter Borden, Kingsport, TN, United States  
Killian, Christopher Moore, Gray, TN, United States  
Moody, Leslie Shane, Johnson City, TN, United States  
McDevitt, Jason Patrick, Wake Forest, NC, United States  
PA Eastman Chemical Company, Kingsport, TN, United States (U.S. corporation)  
PI US 6245871 B1 20010612  
AI US 1999-226116 19990107 (9)  
RLI Continuation-in-part of Ser. No. US 1998-28316, filed on 24 Feb 1998, now abandoned  
PRAI US 1997-44691P 19970418 (60)  
US 1997-45333P 19970501 (60)  
US 1997-45355P 19970502 (60)  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Wu, David W.; Assistant Examiner: Rabago, R.  
LREP Gwinnell, Harry J., Wood, Jonathon D.  
CLMN Number of Claims: 86  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 1402

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Provided are certain transition metal complexes which are useful as catalysts in the polymerization of olefinic monomers. In particular, the invention provides complexes of certain bidentate ligands bonded to Ni, Pd, Co, or Fe, and optionally, one or more neutral Lewis acids, and their use in the polymerization of olefins. Suitable complexes include those of the following structure: ##STR1##

wherein M represents the transition metal, and Q, T, L, W, Z, R.sup.1, R.sup.2 and R.sup.10 represent functional groups.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 8 OF 13 USPATFULL  
AN 2001:36773 USPATFULL  
TI Catalyst compositions for the polymerization of olefins  
IN Ponasik, Jr., James Allen, Kingsport, TN, United States  
McDevitt, Jason Patrick, Wake Forest, NC, United States

Killian, Christopher Moore, Gray, TN, United States  
Mackenzie, Peter Borden, Kingsport, TN, United States  
Moody, Leslie Shane, Johnson City, TN, United States  
Lavoie, Gino Georges, Kingsport, TN, United States  
PA Eastman Chemical Company, Kingsport, TN, United States (U.S.  
corporation)  
PI US 6200925 B1 20010313  
AI US 1998-222614 19981229 (9)  
RLI Continuation-in-part of Ser. No. US 1998-28315, filed on 24 Feb 1998  
PRAI US 1997-40754P 19970313 (60)  
US 1997-44691P 19970418 (60)  
US 1997-45337P 19970501 (60)  
US 1997-45358P 19970502 (60)  
US 1997-45357P 19970502 (60)  
US 1997-45697P 19970506 (60)  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Bell, Mark L.; Assistant Examiner: DiVerdi, Michael J.  
LREP Wood, Jonathan D., Graves, J, Bernard J., Gwinnell, Harry J.  
CLMN Number of Claims: 19  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 2087

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides catalyst systems useful in the polymerization of olefins comprising a transition metal component and a ligand component comprising a Nitrogen atom and/or functional groups comprising a Nitrogen atom, generally in the form of an imine functional group. In certain embodiments, the ligand component may further comprise a phosphorous atom. Preferred ligand components are bidentate (bind to the transition metal at two or more sites) and include a nitrogen-transition metal bond. The transition metal-ligand complex is generally cationic and associated with a weakly coordinating anion. In a preferred embodiment, the catalyst system of the present invention further comprises a Lewis or Bronsted acid complexed with the ligand component of the transition metal-ligand complex.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 9 OF 13 USPATFULL  
AN 2000:121602 USPATFULL  
TI Polyolefin catalysts  
IN Ponasik, Jr., James Allen, Kingsport, TN, United States  
Mackenzie, Peter Borden, Kingsport, TN, United States  
Killian, Christopher Moore, Gray, TN, United States  
PA Eastman Chemical Company, Kingsport, TN, United States (U.S.  
corporation)  
PI US 6117959 20000912  
AI US 1998-145530 19980902 (9)  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Wu, David W.; Assistant Examiner: Harlan, R.  
LREP Wood, Jonathan D., Graves, Jr., Bernard J., Gwinnell, Harry J.  
CLMN Number of Claims: 36  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 938

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention is directed to novel Group 8-10 transition metal catalysts and to batch or continuous polymerizations using these catalysts. The catalysts of the present invention readily convert ethylene and .alpha.-olefins to high molecular weight polymers, and

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allow for olefin polymerizations under various conditions, including ambient temperature and pressure, and in solution. Preferred catalysts are group 8-10 transition metals having certain dipyridyl ligands bonded thereto.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 10 OF 13 USPATFULL  
AN 2000:105843 USPATFULL  
TI Olefin polymerization catalysts containing group 8-10 transition metals, processes employing such catalysts and polymers obtained therefrom  
IN Mackenzie, Peter Borden, Kingsport, TN, United States  
Moody, Leslie Shane, Johnson City, TN, United States  
Killian, Christopher Moore, Gray, TN, United States  
Ponasik, Jr., James Allen, Kingsport, TN, United States  
McDevitt, Jason Patrick, Wake Forest, NC, United States  
Lavoie, Gino Georges, Kingsport, TN, United States  
PA Eastman Chemical Company, Kingsport, TN, United States (U.S. corporation)  
PI US 6103658 20000815  
AI US 1998-177099 19981022 (9)  
RLI Continuation-in-part of Ser. No. US 1998-88223, filed on 1 Jun 1998 which is a continuation-in-part of Ser. No. US 1998-30058, filed on 24 Feb 1998, now abandoned  
PRAI US 1997-62609P 19971022 (60)  
US 1997-40363P 19970310 (60)  
US 1997-41542P 19970325 (60)  
US 1997-42925P 19970404 (60)  
US 1997-43406P 19970404 (60)  
US 1997-44691P 19970418 (60)  
US 1997-59372P 19970918 (60)  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Bell, Mark L.; Assistant Examiner: DiVerdi, Michael J.  
LREP Wood, Jonathan D., Graves, Jr., Bernard J., Gwinnell, Harry J.  
CLMN Number of Claims: 45  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 4328

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods for preparing olefin polymers, and catalysts for preparing olefin polymers are disclosed. The polymers can be prepared by contacting the corresponding monomers with a Group 8-10 transition metal catalyst. The polymers are suitable for processing in conventional extrusion processes, and can be formed into high barrier sheets or films, or low molecular weight resins for use in synthetic waxes in wax coatings or as emulsions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 11 OF 13 USPATFULL  
AN 93:31075 USPATFULL  
TI Reversed phase chromatographic process  
IN Doran, III, Narciso O., Bridgeton, MO, United States  
Dunn, Thomas J., Cedar Hill, MO, United States  
Kneller, Mills T., University City, MO, United States  
Lin, Youlin, Chesterfield, MO, United States  
White, David H., Florissant, MO, United States  
Wong, David Ming-Lee, Chesterfield, MO, United States  
PA Mallinckrodt, Inc., St. Louis, MO, United States (U.S. corporation)  
PI US 5204005 19930420  
AI US 1991-646836 19910128 (7)

09567863

RLI Continuation-in-part of Ser. No. US 1990-484261, filed on 26 Feb 1990,  
now abandoned  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Bascomb, Jr., Wilbur; Assistant Examiner: McCarthy,  
Neil M.  
LREP Senninger, Powers, Leavitt & Roedel  
CLMN Number of Claims: 34  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 651

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB An improved process for the reversed phase chromatographic  
decolorization, separation, and purification of water-soluble, nonionic  
contrast media compounds from solutions containing nonionic compound  
impurities involves the steps of (a) packing a chromatographic column  
with a chromatographic packing material; (b) passing through the column  
a solution containing a water-soluble, nonionic contrast media compound  
and nonionic compounds as impurities at a loading ratio between  
approximately 10 to 1 and 1.5 to 1 wt. packing material/total wt.  
nonionic compounds; and (c) eluting the column to produce an eluate  
containing substantially pure, water-soluble, nonionic contrast media  
compound or MRI agent. The process can be economically practiced on a  
factory scale and efficiently removes non-polar impurities difficult to  
remove by conventional methods.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 12 OF 13 USPATFULL  
AN 87:6526 USPATFULL  
TI Intravenously injectable immunoglobulin G (IGG) and method for producing  
same  
IN Hou, Kenneth C., Glastonbury, CT, United States  
Cogswell, Garrett, Vernon, CT, United States  
PA Cuno Inc., Meriden, CT, United States (U.S. corporation)  
PI US 4639513 19870127  
AI US 1984-656922 19841002 (6)  
RLI Continuation-in-part of Ser. No. US 1984-576448, filed on 2 Feb 1984  
which is a continuation-in-part of Ser. No. US 1983-466114, filed on 14  
Feb 1983, now abandoned And a continuation-in-part of Ser. No. US  
1983-643212, filed on 22 Aug 1983, now abandoned And a  
continuation-in-part of Ser. No. US 1984-643613, filed on 22 Aug 1984  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Kight, John; Assistant Examiner: Draper, Garnette D.  
CLMN Number of Claims: 35  
ECL Exemplary Claim: 1  
DRWN 13 Drawing Figure(s); 12 Drawing Page(s)  
LN.CNT 2876

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method for producing intravenously injectable IgG comprising a  
particulate separation step, an ion exchange separation step and an  
affinity separation step, and the substantially pure, intravenously  
injectable IgG produced by the method.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 13 OF 13 USPATFULL  
AN 82:22645 USPATFULL  
TI Mercurio-organic bonded phase sorbents  
IN Chmielowiec, Jan, 1030 King St. #13, Ottawa, Ontario, Canada K1Z 6K9  
PI US 4329254 19820511

09567863

AI US 1980-167028 19800709 (6)  
PRAI CA 1980-346787 19800229  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Garvin, Patrick  
LREP Craig and Antonelli  
CLMN Number of Claims: 25  
ECL Exemplary Claim: 1  
DRWN 6 Drawing Figure(s); 4 Drawing Page(s)  
LN.CNT 547

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Organomercuric bonded phase sorbent materials useful for chromatographic separation of a wide variety of compounds are described. Their preparation involves reacting an organic compound chemically bonded to a **solid support** substrate with a mercury salt.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 15 1 kwic

L5 ANSWER 1 OF 13 USPATFULL

AB . . . disclosed. The polymers can be prepared by contacting the corresponding monomers with a Group 8-10 transition metal catalyst and a **solid support**. The polymers are suitable for processing in conventional extrusion processes, and can be formed into high barrier sheets or films, . . .

DETD . . . contrast to the polyethylenes prepared using gas phase polymerization while using the same transition metal complex when attached to a **solid support**. As can be seen in FIG. 1, curves 3 and 4 depict dissolution over a much larger temperature range, evidence. . .

DETD . . . 16; in addition, A and B may be linked by a bridging group; wherein the complex is attached to a **solid support**, and wherein the **solid support**, the optional Bronsted or Lewis acid, and the complex are combined in any order to form said catalyst.

DETD . . . for the polymerization of olefins comprising the reaction product of a compound of formula XII, a compound Y and a **solid support**: ##STR2##

DETD . . . preparation of supported catalysts comprising contacting a group 8-10 transition metal complex of a ligand of the formula X, a **solid support**, and optionally a Bronsted or Lewis acid, ##STR3##

DETD . . . 16; in addition, A and B may be linked by a bridging group; wherein the complex is attached to a **solid support**, and wherein the **solid support**, the optional Bronsted or Lewis acid, and the complex are combined in any order to form said supported catalyst.

DETD . . . the preparation of supported catalysts comprising the reaction product of a compound of formula XII, a compound Y and a **solid support**: ##STR4##

DETD . . . 16; in addition, A and B may be linked by a bridging group; wherein the complex is attached to a **solid support**, and wherein the **solid support**, the optional Bronsted or Lewis acid, and the complex are combined in any order.

DETD . . . monomers of the formula RCH.dbd.CHR.sup.8 with the reaction product of a compound of formula XII, a compound Y and a **solid support**: ##STR6##

DETD [0073] with a **solid support** which has been pre-treated with a compound Y,

DETD . . . formula CH.sub.2.dbd.CH(CH.sub.2).sub.nJ comprising a catalyst,

in an olefin polymerization reaction which comprises combining a complex of the formula XII, a **solid support**, and optionally a compound Y, prior to the utilization of said catalyst in said olefin polymerization reaction.

- DETD [0117] with a **solid support** which has been pre-treated with a compound Y, wherein Y is selected from the group consisting of a neutral Lewis.
- DETD [0126] As noted herein, it is preferred that the compounds of the present invention be attached to a **solid support** which has been pretreated with a compound Y, for example, MAO, or mixed with Y in any order. We have. . . as such compositions are blends of different polyolefin polymers. It is believed that when such catalysts are attached to a **solid support**, such as **silica**, olefin polymerizations using such supported catalysts provide a polymer composition which possesses a broad compositional distribution. This is believed to.
- DETD . . . vessel, solely from ethylene, and wherein said polymers are prepared utilizing a Group 8-10 transition metal catalyst supported on a **solid support** which has been pre-treated with a compound Y selected from the group consisting of methylaluminoxane and other aluminum sesquioxides having.
- DETD . . . ethylene, and wherein said polymers are prepared utilizing a Group 8-10 transition metal catalyst which has been reacted with a **solid support** and a compound Y, in any order, wherein Y is selected from the group consisting of methylaluminoxane and other aluminum.
- DETD [0134] We have also recognized that by attaching a Group 8-10 polymerization catalyst to a **solid support** one can improve its functional group compatibility over that observed in the homogenous solution polymerization. In other words, the rate.
- DETD . . . more functional olefin monomers of the formula  $\text{CH.sub.2.dbd.CH(CH.sub.2).sub.nJ}$ , in an olefin polymerization reaction which comprises combining said catalyst with a **solid support**, and optionally a Bronsted or Lewis acid in any order, prior to the utilization of said catalyst in said olefin.
- DETD [0178] Examples of "**solid support**" include inorganic oxide support materials, such as: talcs, silicas, titania, silica/chromia, silica/chromia/titania, silica/alumina, zirconia, aluminum phosphate gels, **silanized silica**, silica hydrogels, silica xerogels, silica aerogels, montmorillonite clay and silica co-gels as well as organic solid supports such as polystyrene. . . F.; Dias, A. J.; "Polyolefin Spheres from Metallocenes Supported on Non-Interacting Polystyrene", 1998, Science, 280, 270-273 (1998).) An especially preferred **solid support** is one which has been pre-treated with Y compounds as described herein, most preferably with MAO. Thus, in a preferred embodiment, the catalysts of the present invention are attached to a **solid support** (by "attached to a **solid support**" is meant ion paired with a component on the surface, adsorbed to the surface or covalently attached to the surface) which has been pre-treated with a compound Y. Alternatively, the catalyst, the compound Y, and the **solid support** can be combined in any order, and any number of Y compounds can be utilized; in addition, the supported catalyst.
- CLM What is claimed is:
- . 16; in addition, A and B may be linked by a bridging group; wherein the complex is attached to a **solid support**, and wherein the **solid support**, the optional Bronsted or Lewis acid, and the complex are combined in any order to form said catalyst.

2. The catalyst of claim 1 wherein the **solid support** is pretreated with a Bronsted or Lewis acid.

- . . . for the polymerization of olefins comprising the reaction product of a compound of formula XII, a compound Y and a **solid support**: ##STR26## R.sup.1 and R.sup.6 each, independently, represent hydrocarbyl, substituted hydrocarbyl, or silyl; A and B are each, independently, a heteroatom. . .
- . . . preparation of supported catalysts comprising contacting a group 8-10 transition metal complex of a ligand of the formula X, a **solid support**, and optionally a Bronsted or Lewis acid, ##STR33## wherein R.sup.1 and R.sup.6 are each, independently, hydrocarbyl, substituted hydrocarbyl, or silyl;. . . 16; in addition, A and B may be linked by a bridging group; wherein the complex is attached to a **solid support**, and wherein the **solid support**, the optional Bronsted or Lewis acid, and the complex are combined in any order to form said supported catalyst.
- 7. The process of claim 6 wherein the **solid support** is pretreated with a Bronsted or Lewis acid.
- . . . A process for the preparation of supported catalysts comprising contacting a compound of formula XII, a compound Y and a **solid support**: ##STR34## R.sup.1 and R.sup.6 each, independently, represent hydrocarbyl, substituted hydrocarbyl, or silyl, A and B are each, independently, a heteroatom. . .
- 11. The process of claim 10, wherein the **solid support** is **silica**.
- 15. A process for the polymerization of olefins, comprising contacting one or more monomers of the formula RCH.dbd.CHR.sup.8 with a. . . 16; in addition, A and B may be linked by a bridging group; wherein the complex is attached to a **solid support**, and wherein the **solid support**, the optional Bronsted or Lewis acid, and the complex are combined in any order.
- 16. The process of claim 15 wherein the **solid support** is pretreated with a Bronsted or Lewis acid.
- . . . monomers of the formula RCH.dbd.CHR.sup.8 with the reaction product of a compound of formula XII, a compound Y and a **solid support**: ##STR43## wherein R and R.sup.8 each, independently, represent a hydrogen, a hydrocarbyl, or a fluoroalkyl, and may be linked to. . .
- . . . monomers of the formula RCH.dbd.CHR.sup.8 with a supported catalyst formed by combining a compound of formula XII: ##STR51## with a **solid support** which has been pre-treated with a compound Y, wherein R and R.sup.8 each, independently, represent a hydrogen, a hydrocarbyl, or. . .
- . . . ethylene, and wherein said polymers are prepared utilizing a Group 8-10 transition metal catalyst which has been reacted with a **solid support** and optionally a compound Y, in any order, wherein Y is selected from the group consisting of methylaluminoxane and other. . .
- . . . more functional olefin monomers of the formula CH.sub.2.dbd.CH(CH.sub.2).sub.nJ, in an olefin polymerization reaction which comprises combining said catalyst with a **solid support**, and optionally a Bronsted or Lewis acid in any order, prior to the utilization of said catalyst in said olefin. . .
- . . . formula CH.sub.2.dbd.CH(CH.sub.2).sub.nJ comprising a catalyst, in an olefin polymerization reaction which comprises combining a complex of the formula XII, a **solid support**, and optionally a compound Y, prior to the utilization of said catalyst in said olefin polymerization reaction. wherein R and. . .

=&gt; d 15 kwic 3

L5 ANSWER 3 OF 13 USPATFULL

SUMM . . . present invention may be used in solution, slurry or gas phase polymerizations. Further, the catalysts may be attached to a **solid support**. In certain embodiments of the present invention, a Lewis or Bronsted acid may be used as a co-catalyst to render. . .

SUMM [0082] Examples of "**solid support**" include inorganic oxide support materials, such as: talcs, silicas, titania, silica/chromia, silica/chromia/titania, silica/alumina, zirconia, aluminum phosphate gels, **silanized silica**, silica hydrogels, silica xerogels, silica aerogels. montmorillonite clay and silica co-gels as well as organic solid supports such as polystyrene. . . F.; Dias, A. J.; "Polyolefin Spheres from Metallocenes Supported on Non-interacting Polystyrene", 1998, Science, 280, 270-273 (1998).) An especially preferred **solid support** is one which has been pre-treated with Y compounds as described herein, most preferably with MAO. Thus, in a preferred embodiment, the catalysts of the present invention are attached to a **solid support** (by "attached to a **solid support**" is meant ion paired with a component on the surface, adsorbed to the surface or covalently attached to the surface) which has been pre-treated with a compound Y. Alternatively, the catalyst, the compound Y, and the **solid support** can be combined in any order, and any number of Y compounds can be utilized; in addition, the supported catalyst. . .

SUMM [0183] As noted above, it is preferred that certain of the compounds of the present invention be attached to a **solid support** which has been pre-treated with a compound Y, for example, MAO, or mixed with Y in any order. When such. . . as such compositions are blends of different polyolefin polymers. It is believed that when such catalysts are attached to a **solid support**, such as **silica**, polyolefin polymerizations using such supported catalysts provide a polymer composition which possesses a broad compositional distribution, This is believed to. . .

CLM What is claimed is:

18. The process of claim 4 wherein the transition metal olefin polymerization catalyst system is attached to a **solid support**.

19. The process of claim 5, 8, 10, or 11 wherein the transition metal olefin polymerization catalyst system is attached to a **solid support**.

40. The catalyst of claim 24 wherein the catalyst is attached to a **solid support**.

41. The catalyst of claim 27 wherein the catalyst is attached to a **solid support**.

42. The catalyst of claim 30 wherein the catalyst is attached to a **solid support**.

43. The catalyst of claim 32 wherein the catalyst is attached to a **solid support**.

44. The catalyst of claim 33 wherein the catalyst is attached to a **solid support**.

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(FILE 'HOME' ENTERED AT 09:47:13 ON 31 MAR 2003)

FILE 'BIOSIS, MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 09:50:26 ON  
31 MAR 2003

L1 863 S SILANIZED SILICA  
L2 43 S L1 AND SOLID SUPPORT  
L3 1 S L2 AND CLEARING  
L4 13 S L2 AND SILICA (3A) (MATRIX OR SOLID SUPPORT)  
L5 13 DUP REM L4 (0 DUPLICATES REMOVED)

=> s l2 and isolat? (3a) biologi?  
L6 0 L2 AND ISOLAT? (3A) BIOLOGI?

=> s l2 and isolating  
L7 6 L2 AND ISOLATING

=> dup rem l7  
PROCESSING COMPLETED FOR L7  
L8 6 DUP REM L7 (0 DUPLICATES REMOVED)

=> d l8 bib abs 1-6

L8 ANSWER 1 OF 6 USPATFULL  
AN 2002:299290 USPATFULL  
TI Method for detecting PSA and its molecular forms using thiophilic gel on  
magnetic beads  
IN Sulkowski, Eugene, Buffalo, NY, UNITED STATES  
Chadha, Kailash C., Williamsville, NY, UNITED STATES  
Kawinski, Elzbieta, Orchard Park, NY, UNITED STATES  
PI US 2002166814 A1 20021114  
AI US 2002-134235 A1 20020429 (10)  
RLI Continuation-in-part of Ser. No. US 2000-624692, filed on 24 Jul 2000,  
GRANTED, Pat. No. US 6379550 Continuation-in-part of Ser. No. US  
2001-851263, filed on 8 May 2001, PENDING  
DT Utility  
FS APPLICATION  
LREP Michael L. Dunn, Dunn & Associates, P.O. Box 10, Newfane, NY, 14108  
CLMN Number of Claims: 21  
ECL Exemplary Claim: 1  
DRWN 9 Drawing Page(s)  
LN.CNT 740

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method for capturing PSA and its molecular forms that may be in a  
fluid biological material including the steps of: preparing a bed of  
magnetic beads by binding thiophilic ligands to the beds where the  
thiophilic ligands bind PSA and its complexes, said thiophilic ligands  
comprising a two part structure wherein one part can be characterized as  
a hyz6drophilic electron acceptor and the other part is sulfur which  
acts as an electron donor; selecting a sample of a fluid biological  
material to be tested for PSA and its complexes; introducing the sample  
into the magnetic beads bound to thiophilic ligands so that PSA and its  
complexes bind to the thiophilic ligand; and magnetically removing the  
beads from unbound portions of the sample.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 2 OF 6 USPATFULL  
AN 2002:265945 USPATFULL  
TI BONE MARROW CELLS AS A SOURCE OF NEURONS FOR BRAIN AND SPINAL CORD  
REPAIR  
IN SANCHEZ-RAMOS, JUAN, TAMPA, FL, UNITED STATES

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SONG, SHIJIE, TAMPA, FL, UNITED STATES  
JANSSEN, WILLIAM, TAMPA, FL, UNITED STATES  
SANBERG, PAUL, SPRING HILL, FL, UNITED STATES  
FREEMAN, THOMAS, TAMPA, FL, UNITED STATES

PI US 2002146821 A1 20021010  
US 6528245 B2 20030304  
AI US 1999-307824 A1 19990507 (9)  
PRAI US 1998-84533P 19980507 (60)  
US 1998-112979P 19981217 (60)  
US 1999-129684P 19990416 (60)  
DT Utility  
FS APPLICATION  
LREP SIERRA PATENT GROUP, LTD., P O BOX 6149, STATELINE, NV, 89449  
CLMN Number of Claims: 20  
ECL Exemplary Claim: 1  
DRWN 7 Drawing Page(s)  
LN.CNT 1439

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Bone marrow stromal cells (BMSC) differentiate into neuron-like phenotypes in vitro and in vivo, engrafted into normal or denervated rat striatum. The BMSC did not remain localized to the site of the graft, but migrated throughout the brain and integrated into specific brain regions in various architectonic patterns. The most orderly integration of BMSC was in the laminar distribution of cerebellar Purkinje cells, where the BMSC-derived cells took on the Purkinje phenotype. The BMSC exhibited site-dependent differentiation and expressed several neuronal markers including neuron-specific nuclear protein, tyrosine hydroxylase and calbindin. BMSC can be used to target specific brain nuclei in strategies of neural repair and gene therapy.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 3 OF 6 USPATFULL  
AN 2002:48319 USPATFULL  
TI Human cord blood as a source of neural tissue for repair of the brain and spinal cord  
IN Sanberg, Paul, Spring Hill, FL, UNITED STATES  
Sanchez-Remos, Juan, Tampa, FL, UNITED STATES  
Willing, Alison, Tampa, FL, UNITED STATES  
Richard, Daniel D., Sedona, AZ, UNITED STATES  
PI US 2002028510 A1 20020307  
AI US 2001-801221 A1 20010307 (9)  
PRAI US 2000-188069P 20000309 (60)  
US 2001-269238P 20010216 (60)  
DT Utility  
FS APPLICATION  
LREP COLEMAN SUDOL SAPONE, P.C., PATENT, TRADEMARK AND COPYRIGHT MATTERS, 14th Floor, 708 Third Avenue, NEW YORK, NY, 10017  
CLMN Number of Claims: 69  
ECL Exemplary Claim: 1  
DRWN 9 Drawing Page(s)  
LN.CNT 3155  
AB The present invention relates to the use of umbilical cord blood cells from a donor or patient to provide neural cells which may be used in transplantation. The isolated cells according to the present invention may be used to effect autologous and allogeneic transplantation and repair of neural tissue, in particular, tissue of the brain and spinal cord and to treat neurodegenerative diseases of the brain and spinal cord.

L8 ANSWER 4 OF 6 USPATFULL

09567863

AN 2002:95250 USPATFULL  
TI Method for detecting PSA and its molecular forms using thiophilic gel  
IN Chadha, Kailash C., Williamsville, NY, United States  
Sulkowski, Eugene, Buffalo, NY, United States  
Kawinski, Elzbieta, Orchard Park, NY, United States  
PA Health Research, Inc., Buffalo, NY, United States (U.S. corporation)  
PI US 6379550 B1 20020430  
AI US 2000-624692 20000724 (9)  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Therkorn, Ernest G.  
LREP Dunn, Michael L.  
CLMN Number of Claims: 19  
ECL Exemplary Claim: 13  
DRWN 9 Drawing Figure(s); 9 Drawing Page(s)  
LN.CNT 688  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB A method for capturing PSA and its molecular forms that may be in a fluid biological material including the steps of: preparing a chromatographic column by placing a thiophilic gel in a column where the thiophilic gel is formed from a water insoluble polymer where the surface of the gel is provided with thiophilic moieties that bind PSA in the presence of an adsorption liquid but that will release PSA upon elution with an eluting liquid, said thiophilic moieties comprising a two part structure wherein one part can be characterized as a hydrophilic electron acceptor and the other part is sulfur which acts as an electron donor; selecting a sample of a fluid biological material to be tested for PSA and its complexes; introducing the sample into the column; eluting the sample through the column; rinsing the column with adsorption liquid to remove materials that are unbound to the thiophilic gel; and capturing PSA and its complexes in eluted column fractions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 5 OF 6 USPATFULL  
AN 97:17918 USPATFULL  
TI Compositions and methods for enhanced drug delivery  
IN Hale, Ron L., Woodside, CA, United States  
Lu, Amy, Los Altos, CA, United States  
Solaz, Dennis, San Francisco, CA, United States  
Selick, Harold E., Belmont, CA, United States  
Oldenburg, Kevin R., Fremont, CA, United States  
Zaffaroni, Alejandro C., Atherton, CA, United States  
PA Affymax Technologies N.V., Middlesex, England (non-U.S. corporation)  
PI US 5607691 19970304  
AI US 1995-449188 19950524 (8)  
RLI Continuation of Ser. No. US 1993-164293, filed on 9 Dec 1993, now abandoned which is a continuation-in-part of Ser. No. US 1993-77296, filed on 14 Jun 1993, now abandoned which is a continuation-in-part of Ser. No. US 1992-898219, filed on 12 Jun 1992, now abandoned And a continuation-in-part of Ser. No. US 1993-9463, filed on 27 Jan 1993, now abandoned  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Levy, Neil S.  
LREP Stevens, Lauren L.  
CLMN Number of Claims: 5  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 5349  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB The present invention relates to methods of delivering pharmaceutical

agents across membranes, including the skin layer or mucosal membranes of a patient. A pharmaceutical agent is covalently bonded to a chemical modifier, via a physiologically cleavable bond, such that the membrane transport and delivery of the agent is enhanced.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 6 OF 6 USPATFULL  
 AN 87:6526 USPATFULL  
 TI Intravenously injectable immunoglobulin G (IGG) and method for producing same  
 IN Hou, Kenneth C., Glastonbury, CT, United States  
 Cogswell, Garrett, Vernon, CT, United States  
 PA Cuno Inc., Meriden, CT, United States (U.S. corporation)  
 PI US 4639513 19870127  
 AI US 1984-656922 19841002 (6)  
 RLI Continuation-in-part of Ser. No. US 1984-576448, filed on 2 Feb 1984 which is a continuation-in-part of Ser. No. US 1983-466114, filed on 14 Feb 1983, now abandoned And a continuation-in-part of Ser. No. US 1983-643212, filed on 22 Aug 1983, now abandoned And a continuation-in-part of Ser. No. US 1984-643613, filed on 22 Aug 1984  
 DT Utility  
 FS Granted  
 EXNAM Primary Examiner: Kight, John; Assistant Examiner: Draper, Garnette D.  
 CLMN Number of Claims: 35  
 ECL Exemplary Claim: 1  
 DRWN 13 Drawing Figure(s); 12 Drawing Page(s)  
 LN.CNT 2876

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method for producing intravenously injectable IgG comprising a particulate separation step, an ion exchange separation step and an affinity separation step, and the substantially pure, intravenously injectable IgG produced by the method.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 18 5 kwic

L8 ANSWER 5 OF 6 USPATFULL  
 DETD . . . of chemical modifiers or pharmaceutical agent-chemical modifier complexes. These soluble collections can be prepared directly or, in some embodiments, a **solid support** is used to synthesize a library or array of chemical modifiers or complexes of diverse length and composition. The members. . .  
 DETD . . . of interest are generally well known in the art, and therefore, not described in detail herein. Methods of identifying and **isolating** genes encoding proteins of interest, or for constructing such genes, are well understood and developed. These processes are described in. . .  
 DETD . . . ends to blunt-ended DNA, construction of synthetic DNAs by assembly of short oligonucleotides, cDNA synthesis techniques, and synthetic probes for **isolating** genes having a particular function. Various promoter sequences and other regulatory DNA sequences used in achieving expression, and various types. . .  
 DETD . . . The reaction mixture was concentrated in vacuo and the residue was triturated with ether. The residue was passed through two **silanized silica** gel columns (eluting with 3% methanol in dichloromethane) and was then dissolved in dichloromethane (10 ml) and filtered. Column chromatography. . .  
 DETD . . . added dropwise to ether (30 ml). The cloudy solution was centrifuged and the residue was triturated with ether. Column

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chromatography (RP2-**silanized silica**, eluting with  
5% methanol in dichloromethane) yielded the desired trimethylammonium  
salt (15 mg, 25% yield) whose structure was verified by. . .

=> s l8 and chaotrop?

L9 0 L8 AND CHAOTROP?

=> d his

(FILE 'HOME' ENTERED AT 09:47:13 ON 31 MAR 2003)

FILE 'BIOSIS, MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 09:50:26 ON  
31 MAR 2003

L1 863 S SILANIZED SILICA  
L2 43 S L1 AND SOLID SUPPORT  
L3 1 S L2 AND CLEARING  
L4 13 S L2 AND SILICA (3A) (MATRIX OR SOLID SUPPORT)  
L5 13 DUP REM L4 (0 DUPLICATES REMOVED)  
L6 0 S L2 AND ISOLAT? (3A) BIOLOGI?  
L7 6 S L2 AND ISOLATING  
L8 6 DUP REM L7 (0 DUPLICATES REMOVED)  
L9 0 S L8 AND CHAOTROP?

=> s l2 not l8

L10 37 L2 NOT L8

=> s l10 and biological

L11 8 L10 AND BIOLOGICAL

=> d l11 bib abs 1-8

L11 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2003 ACS  
AN 1997:213144 CAPLUS  
DN 126:302887  
TI Differences in the physical properties of lipid monolayers and bilayers on  
a spherical **solid support**  
AU Linseisen, Frank M.; Hetzer, Michael; Brumm, Thomas; Bayerl, Thomas M.  
CS Department of Physics, University of British Columbia, Vancouver, BC, V6T  
1Z1, Can.  
SO Biophysical Journal (1997), 72(4), 1659-1667  
CODEN: BIOJAU; ISSN: 0006-3495  
PB Biophysical Society  
DT Journal  
LA English  
AB A monolayer of 1,2-dipalmitoyl-d62-glycero-3-phosphocholine (DPPC-d62)  
coated onto **silanized silica** beads (spherical  
supported monolayer: SSM) is studied by 2H-NMR and DSC. The results are  
compared with those obtained from a single bilayer on the same  
**solid support** (spherical supported vesicles: SSV) and  
from multilamellar vesicles (MLV). The phase transition temp. (Tm) of the  
SSMs is significantly higher than that of the bilayer systems and the  
extent of this difference depends on the lipid d. in the monolayer that is  
detd. during its prepn. 2H-NMR reveals a gel and fluid phase coexistence  
in the SSM transition region. A comparison of the 2H-NMR line shapes  
suggests the presence of highly curved structures for the fluid phase of  
the SSM samples. From a comparison of SSM and SSV transverse relaxation  
in the fluid phase we can conclude that the lateral diffusion coeff. D1 in  
supported monolayers is similar to that in bilayers.

L11 ANSWER 2 OF 8 USPATFULL  
AN 2003:78030 USPATFULL

09567863

TI Individualization of therapy with hyperlipidemia agents  
IN Leyland-Jones, Brian, Miami, FL, UNITED STATES  
PA McGill University, Montreal, CANADA (U.S. corporation)  
PI US 2003053950 A1 20030320  
AI US 2002-125690 A1 20020417 (10)  
PRAI US 2001-284210P 20010418 (60)  
DT Utility  
FS APPLICATION  
LREP HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX  
9133, CONCORD, MA, 01742-9133  
CLMN Number of Claims: 113  
ECL Exemplary Claim: 1  
DRWN 24 Drawing Page(s)  
LN.CNT 5288  
AB The invention relates to the individualization of therapy on the basis  
of a phenotypic profile of an individual. More specifically, the present  
invention relates to the use of metabolic phenotyping for the  
individualization of treatment with hyperlipidemia agents.

L11 ANSWER 3 OF 8 USPATFULL

AN 2003:70919 USPATFULL  
TI Individualization of therapy with gastroesophageal reflux disease agents  
IN Leyland-Jones, Brian, Miami, FL, UNITED STATES  
PA McGill University, Montreal, CANADA (U.S. corporation)  
PI US 2003049204 A1 20030313  
AI US 2002-132080 A1 20020424 (10)  
PRAI US 2001-285687P 20010424 (60)  
DT Utility  
FS APPLICATION  
LREP HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX  
9133, CONCORD, MA, 01742-9133  
CLMN Number of Claims: 83  
ECL Exemplary Claim: 1  
DRWN 23 Drawing Page(s)  
LN.CNT 5184  
AB The invention relates to the individualization of therapy on the basis  
of a phenotypic profile of an individual. More specifically, the present  
invention relates to the use of metabolic phenotyping for the  
individualization of treatment with GERD agents.

L11 ANSWER 4 OF 8 USPATFULL

AN 2002:307597 USPATFULL  
TI Polymeric microspheres  
IN Walt, David R., Lexington, MA, UNITED STATES  
Mandal, Tarun K., Kolkata, INDIA  
Fleming, Michael S., Londonderry, NH, UNITED STATES  
PI US 2002172716 A1 20021121  
AI US 2001-33389 A1 20011025 (10)  
PRAI US 2000-243104P 20001025 (60)  
DT Utility  
FS APPLICATION  
LREP MINTZ, LEVIN, COHN, FERRIS, GLOVSKY, AND POPEO, P.C., ONE FINANCIAL  
CENTER, BOSTON, MA, 02111  
CLMN Number of Claims: 60  
ECL Exemplary Claim: 1  
DRWN 19 Drawing Page(s)  
LN.CNT 1374

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention features core-shell microsphere compositions, hollow  
polymeric microspheres, and methods for making the microspheres. The

09567863

microspheres are characterized as having a polymeric shell with consistent shell thickness.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 5 OF 8 USPATFULL  
AN 1999:124333 USPATFULL  
TI Macrocyclic antibiotics as separation agents  
IN Armstrong, Daniel, Rolla, MO, United States  
PA Curators of the University of Missouri, Columbia, MO, United States  
(U.S. corporation)  
PI US 5964996 19991012  
AI US 1998-187369 19981106 (9)  
RLI Division of Ser. No. US 1997-851485, filed on 5 May 1997, now patented,  
Pat. No. US 5874005 which is a division of Ser. No. US 532581  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Therkorn, Ernest G.  
LREP Bierman, Muserlian and Lucas  
CLMN Number of Claims: 19  
ECL Exemplary Claim: 1  
DRWN 9 Drawing Figure(s); 4 Drawing Page(s)  
LN.CNT 1950

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Macrocyclic antibiotics having ring structures with at least 10 members act as separation agents in crystallization, precipitation, filtration, electrophoresis and chromatography. The macrocyclic antibiotics include ansamacrolides, macrolides, macrocyclic peptides, polyenes and derivatives thereof. The process has been found to be especially advantageous for separation of optical isomers by electrophoresis and chromatography.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 6 OF 8 USPATFULL  
AN 1999:34156 USPATFULL  
TI Process for removing aromatic heterocyclic compounds product-containing solutions  
IN Schuler, Eckhard, Marburg, Germany, Federal Republic of  
Wenz, Karl-Heinz, Weimar, Germany, Federal Republic of  
PA Behringwerke Aktiengesellschaft, Marburg, Germany, Federal Republic of  
(non-U.S. corporation)  
PI US 5883256 19990316  
AI US 1996-757089 19961126 (8)  
PRAI DE 1995-19544297 19951128  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Rotman, Alan L.; Assistant Examiner: Aulakh, Charanjit S.  
LREP Finnegan, Henderson, Farabow, Garrett & Dunner, L.L.P.  
CLMN Number of Claims: 20  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 500

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A process for removing aromatic heterocyclic compounds from a product-containing solution, in particular a protein solution, by bringing the solution into contact with a support material. The process is preferably carried out following a virus inactivation with acridine or acridine derivatives and makes it possible to remove these virus-inactivating agents from the solution without there being any significant product losses or changes in the **biological**

09567863

activity of the solution.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 7 OF 8 USPATFULL  
AN 1999:24231 USPATFULL  
TI Macrocyclic antibiotics as separation agents  
IN Armstrong, Daniel, Rolla, MO, United States  
PA The Curators of the University of Missouri, Columbia, MO, United States  
(U.S. corporation)  
PI US 5874005 19990223  
AI US 1997-851485 19970505 (8)  
RLI Division of Ser. No. US 1995-532581, filed on 29 Sep 1995, now patented,  
Pat. No. US 5626727, issued on 6 May 1997 which is a  
continuation-in-part of Ser. No. US 1994-198409, filed on 22 Feb 1994,  
now abandoned  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Therkorn, Ernest G.  
LREP Bierman, Muserlian and Lucas  
CLMN Number of Claims: 10  
ECL Exemplary Claim: 1  
DRWN 9 Drawing Figure(s); 4 Drawing Page(s)  
LN.CNT 2036

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Macrocyclic antibiotics having ring structures with at least 10 members  
act as separation agents in crystallization, precipitation, filtration,  
electrophoresis and chromatography. The macrocyclic antibiotics include  
ansamacrolides, macrolides, marocyclic peptides, polyenes and  
derivatives thereof. The process has been found to be especially  
advantageous for separation of optical isomers by electrophoresis and  
chromatography.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 8 OF 8 USPATFULL  
AN 97:38104 USPATFULL  
TI Macrocyclic antibiotics as separation agents  
IN Armstrong, Daniel, Rolla, MO, United States  
PA Advanced Separation Technologies Inc., Whippany, NJ, United States (U.S.  
corporation)  
PI US 5626757 19970506  
WO 9522390 19950824  
AI US 1995-532581 19950929 (8)  
WO 1995-US2071 19950217  
19950929 PCT 371 date  
19950929 PCT 102(e) date  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Therkorn, Ernest G.  
LREP Lucas & Just  
CLMN Number of Claims: 10  
ECL Exemplary Claim: 1  
DRWN 9 Drawing Figure(s); 4 Drawing Page(s)  
LN.CNT 2011

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Macrocyclic antibiotics having ring structures with at least 10 members  
act as separation agents in crystallization, precipitation, filtration,  
electrophoresis and chromatography. The macrocyclic antibiotics include  
ansamacrolides, macrolides, macrocyclic peptides, polyenes and  
derivatives thereof. The process has been found to be especially  
advantageous for separation of optical isomers by electrophoresis and



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chromatography.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d l11 6 kwic

L11 ANSWER 6 OF 8 USPATFULL

AB . . . possible to remove these virus-inactivating agents from the solution without there being any significant product losses or changes in the **biological** activity of the solution.

SUMM A process for removing lipid-soluble process chemicals from a **biological** material by means of hydrophobic exchange chromatography on a C-6 to C-24 resin is disclosed in European Patent No. 0. . .

SUMM . . . the product composition or the structure of the individual components occurring at the same time. In association with this, any **biological** activity of the solution which is present should to a large extent be conserved.

SUMM The following commercial products, for example, come into this category of support materials: LiChroprep RP-2 (from Merck, Darmstadt), **silanized silica** gel 60 (from Merck, Darmstadt) and TMS-250 (C1-alkylated, end-capped with trimethylsilyl groups; from Tosohaas).

SUMM . . . in particular a protein solution, without any significant, concomitant change in the composition of the product or change in the **biological** activity of this solution. Furthermore, the advantage arises from a combination of a process for virus inactivation using acridine and/or. . .

CLM What is claimed is:

. . . hypericin, psoralen, methylene blue and derivatives of these compounds from a product-containing solution, which comprises contacting the solution with a **solid support** material having a high affinity for the aromatic heterocyclic compound and a low affinity for the product to selectively remove. . .

5. The process as claimed in claim 1, wherein the **solid support** material is a gel support, an ion exchange support, a support which has been modified in a polar manner or. . .

12. The process as claimed in claim 1, wherein the process is carried out by filtration through the **solid support** material or flow over the **solid support** material.

=> s l11 and salt

L12 5 L11 AND SALT

=> s l12 and chaotrop?

L13 0 L12 AND CHAOTROP?

=> s l11 and iodide

L14 0 L11 AND IODIDE

=> s l11 and perchlorate

L15 0 L11 AND PERCHLORATE

=> s l11 and guanidinium

L16 2 L11 AND GUANIDINIUM

=> d l16 bib abs 1-2

L16 ANSWER 1 OF 2 USPATFULL

09567863

AN 2003:78030 USPATFULL  
TI Individualization of therapy with hyperlipidemia agents  
IN Leyland-Jones, Brian, Miami, FL, UNITED STATES  
PA McGill University, Montreal, CANADA (U.S. corporation)  
PI US 2003053950 A1 20030320  
AI US 2002-125690 A1 20020417 (10)  
PRAI US 2001-284210P 20010418 (60)  
DT Utility  
FS APPLICATION  
LREP HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX  
9133, CONCORD, MA, 01742-9133  
CLMN Number of Claims: 113  
ECL Exemplary Claim: 1  
DRWN 24 Drawing Page(s)  
LN.CNT 5288  
AB The invention relates to the individualization of therapy on the basis  
of a phenotypic profile of an individual. More specifically, the present  
invention relates to the use of metabolic phenotyping for the  
individualization of treatment with hyperlipidemia agents.

L16 ANSWER 2 OF 2 USPATFULL  
AN 2003:70919 USPATFULL  
TI Individualization of therapy with gastroesophageal reflux disease agents  
IN Leyland-Jones, Brian, Miami, FL, UNITED STATES  
PA McGill University, Montreal, CANADA (U.S. corporation)  
PI US 2003049204 A1 20030313  
AI US 2002-132080 A1 20020424 (10)  
PRAI US 2001-285687P 20010424 (60)  
DT Utility  
FS APPLICATION  
LREP HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX  
9133, CONCORD, MA, 01742-9133  
CLMN Number of Claims: 83  
ECL Exemplary Claim: 1  
DRWN 23 Drawing Page(s)  
LN.CNT 5184  
AB The invention relates to the individualization of therapy on the basis  
of a phenotypic profile of an individual. More specifically, the present  
invention relates to the use of metabolic phenotyping for the  
individualization of treatment with GERD agents.

=> s l11 not l16

L17 6 L11 NOT L16

=> s l17 and trichloroacetate

L18 0 L17 AND TRICHLOROACETATE

=> d l17 bib abs 1-6

L17 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2003 ACS  
AN 1997:213144 CAPLUS  
DN 126:302887  
TI Differences in the physical properties of lipid monolayers and bilayers on  
a spherical **solid support**  
AU Linseisen, Frank M.; Hetzer, Michael; Brumm, Thomas; Bayerl, Thomas M.  
CS Department of Physics, University of British Columbia, Vancouver, BC, V6T  
1Z1, Can.  
SO Biophysical Journal (1997), 72(4), 1659-1667  
CODEN: BIOJAU; ISSN: 0006-3495

09567863

PB Biophysical Society  
DT Journal  
LA English  
AB A monolayer of 1,2-dipalmitoyl-d62-glycero-3-phosphocholine (DPPC-d62) coated onto **silanized silica** beads (spherical supported monolayer: SSM) is studied by 2H-NMR and DSC. The results are compared with those obtained from a single bilayer on the same **solid support** (spherical supported vesicles: SSV) and from multilamellar vesicles (MLV). The phase transition temp. (Tm) of the SSMs is significantly higher than that of the bilayer systems and the extent of this difference depends on the lipid d. in the monolayer that is detd. during its prepn. 2H-NMR reveals a gel and fluid phase coexistence in the SSM transition region. A comparison of the 2H-NMR line shapes suggests the presence of highly curved structures for the fluid phase of the SSM samples. From a comparison of SSM and SSV transverse relaxation in the fluid phase we can conclude that the lateral diffusion coeff. D1 in supported monolayers is similar to that in bilayers.

L17 ANSWER 2 OF 6 USPATFULL  
AN 2002:307597 USPATFULL  
TI Polymeric microspheres  
IN Walt, David R., Lexington, MA, UNITED STATES  
Mandal, Tarun K., Kolkata, INDIA  
Fleming, Michael S., Londonderry, NH, UNITED STATES  
PI US 2002172716 A1 20021121  
AI US 2001-33389 A1 20011025 (10)  
PRAI US 2000-243104P 20001025 (60)  
DT Utility  
FS APPLICATION  
LREP MINTZ, LEVIN, COHN, FERRIS, GLOVSKY, AND POPEO, P.C., ONE FINANCIAL CENTER, BOSTON, MA, 02111  
CLMN Number of Claims: 60  
ECL Exemplary Claim: 1  
DRWN 19 Drawing Page(s)  
LN.CNT 1374  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB The invention features core-shell microsphere compositions, hollow polymeric microspheres, and methods for making the microspheres. The microspheres are characterized as having a polymeric shell with consistent shell thickness.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L17 ANSWER 3 OF 6 USPATFULL  
AN 1999:124333 USPATFULL  
TI Macrocyclic antibiotics as separation agents  
IN Armstrong, Daniel, Rolla, MO, United States  
PA Curators of the University of Missouri, Columbia, MO, United States (U.S. corporation)  
PI US 5964996 19991012  
AI US 1998-187369 19981106 (9)  
RLI Division of Ser. No. US 1997-851485, filed on 5 May 1997, now patented, Pat. No. US 5874005 which is a division of Ser. No. US 532581  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Therkorn, Ernest G.  
LREP Bierman, Muserlian and Lucas  
CLMN Number of Claims: 19  
ECL Exemplary Claim: 1  
DRWN 9 Drawing Figure(s); 4 Drawing Page(s)  
LN.CNT 1950  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

09567863

AB      Macrocyclic antibiotics having ring structures with at least 10 members act as separation agents in crystallization, precipitation, filtration, electrophoresis and chromatography. The macrocyclic antibiotics include ansamacrolides, macrolides, macrocyclic peptides, polyenes and derivatives thereof. The process has been found to be especially advantageous for separation of optical isomers by electrophoresis and chromatography.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L17   ANSWER 4 OF 6   USPATFULL

AN      1999:34156   USPATFULL

TI      Process for removing aromatic heterocyclic compounds product-containing solutions

IN      Schuler, Eckhard, Marburg, Germany, Federal Republic of  
Wenz, Karl-Heinz, Weimar, Germany, Federal Republic of

PA      Behringwerke Aktiengesellschaft, Marburg, Germany, Federal Republic of  
(non-U.S. corporation)

PI      US 5883256                      19990316

AI      US 1996-757089                19961126 (8)

PRAI   DE 1995-19544297            19951128

DT      Utility

FS      Granted

EXNAM   Primary Examiner: Rotman, Alan L.; Assistant Examiner: Aulakh, Charanjit S.

LREP    Finnegan, Henderson, Farabow, Garrett & Dunner, L.L.P.

CLMN    Number of Claims: 20

ECL      Exemplary Claim: 1

DRWN    No Drawings

LN.CNT 500

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB      A process for removing aromatic heterocyclic compounds from a product-containing solution, in particular a protein solution, by bringing the solution into contact with a support material. The process is preferably carried out following a virus inactivation with acridine or acridine derivatives and makes it possible to remove these virus-inactivating agents from the solution without there being any significant product losses or changes in the **biological** activity of the solution.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L17   ANSWER 5 OF 6   USPATFULL

AN      1999:24231   USPATFULL

TI      Macrocyclic antibiotics as separation agents

IN      Amstrong, Daniel, Rolla, MO, United States

PA      The Curators of the University of Missouri, Columbia, MO, United States  
(U.S. corporation)

PI      US 5874005                      19990223

AI      US 1997-851485                19970505 (8)

RLI     Division of Ser. No. US 1995-532581, filed on 29 Sep 1995, now patented, Pat. No. US 5626727, issued on 6 May 1997 which is a continuation-in-part of Ser. No. US 1994-198409, filed on 22 Feb 1994, now abandoned

DT      Utility

FS      Granted

EXNAM   Primary Examiner: Therkorn, Ernest G.

LREP    Bierman, Muserlian and Lucas

CLMN    Number of Claims: 10

ECL      Exemplary Claim: 1

DRWN    9 Drawing Figure(s); 4 Drawing Page(s)

LN.CNT 2036

09567863

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB     Macrocyclic antibiotics having ring structures with at least 10 members act as separation agents in crystallization, precipitation, filtration, electrophoresis and chromatography. The macrocyclic antibiotics include ansamacrolides, macrolides, macrocyclic peptides, polyenes and derivatives thereof. The process has been found to be especially advantageous for separation of optical isomers by electrophoresis and chromatography.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L17   ANSWER 6 OF 6   USPATFULL

AN     97:38104   USPATFULL

TI     Macrocyclic antibiotics as separation agents

IN     Armstrong, Daniel, Rolla, MO, United States

PA     Advanced Separation Technologies Inc., Whippany, NJ, United States (U.S. corporation)

PI     US 5626757                   19970506

WO 9522390   19950824

AI     US 1995-532581           19950929 (8)

WO 1995-US2071           19950217

19950929   PCT 371 date

19950929   PCT 102(e) date

DT     Utility

FS     Granted

EXNAM   Primary Examiner: Therkorn, Ernest G.

LREP    Lucas & Just

CLMN    Number of Claims: 10

ECL     Exemplary Claim: 1

DRWN    9 Drawing Figure(s); 4 Drawing Page(s)

LN.CNT 2011

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB     Macrocyclic antibiotics having ring structures with at least 10 members act as separation agents in crystallization, precipitation, filtration, electrophoresis and chromatography. The macrocyclic antibiotics include ansamacrolides, macrolides, macrocyclic peptides, polyenes and derivatives thereof. The process has been found to be especially advantageous for separation of optical isomers by electrophoresis and chromatography.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=>

=> d his

(FILE 'HOME' ENTERED AT 09:47:13 ON 31 MAR 2003)

FILE 'BIOSIS, MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 09:50:26 ON 31 MAR 2003

L1           863 S SILANIZED SILICA  
L2           43 S L1 AND SOLID SUPPORT  
L3           1 S L2 AND CLEARING  
L4           13 S L2 AND SILICA (3A) (MATRIX OR SOLID SUPPORT)  
L5           13 DUP REM L4 (0 DUPLICATES REMOVED)  
L6           0 S L2 AND ISOLAT? (3A) BIOLOGI?  
L7           6 S L2 AND ISOLATING  
L8           6 DUP REM L7 (0 DUPLICATES REMOVED)  
L9           0 S L8 AND CHAOTROP?  
L10          37 S L2 NOT L8  
L11          8 S L10 AND BIOLOGICAL  
L12          5 S L11 AND SALT

09567863

L13 0 S L12 AND CHAOTROP?  
L14 0 S L11 AND IODIDE  
L15 0 S L11 AND PERCHLORATE  
L16 2 S L11 AND GUANIDINIUM  
L17 6 S L11 NOT L16  
L18 0 S L17 AND TRICHLOROACETATE

=> s l1 and silane ligands

L19 2 L1 AND SILANE LIGANDS

=> d l19 bib abs 1-2

L19 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2003 ACS

AN 2002:368648 CAPLUS

DN 136:364877

TI Lysate clearance and automated nucleic acid isolation using silanized magnetic silica matrices

IN Bitner, Rex M.; Simpson, Daniel J.; Flemming, Roderick G.; Koller, Susan C.

PA Promega Corporation, USA

SO PCT Int. Appl., 48 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002038758	A1	20020516	WO 2001-US46710	20011108
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	AU 2002025942	A5	20020521	AU 2002-25942	20011108
PRAI	US 2000-711782	A	20001113		
	WO 2001-US46710	W	20011108		

AB A method is provided for using a **silanized silica** matrix to isolate a target nucleic acids, such as plasmid DNA, fragments of DNA, chromosomal DNA, or RNA from contaminants, including proteins, lipids, cellular debris, or non-target nucleic acids. The **silanized silica** matrix comprises a silica based solid phase and a plurality of **silane ligands** covalently attached to the surface of the solid phase. Non-target material absorbs to the **silanized silica** matrix in the presence of a sufficient concn. of chaotropic salt, while target nucleic acids adsorb to the matrix under other soln. conditions. The method of using the **silanized silica** matrix of the present invention can be used to clear solns. of disrupted biol. material, and to isolate nucleic acids therefrom or from other solns. contg. nucleic acids and at least one contaminant. The prepn. of MagneSil particles derivatized with 3-glycidoxypropyltrimethoxy silane is demonstrated. Plasmid extn. from *Escherichia coli* cleared lysates prepd. using chaotropic denaturants without further addns. or using unmodified MagneSil particles and silanized MagneSil was tested. Highest yields and quality were obtained using the silanized MagneSil. Used of the silanized MAGNESil.

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 2 OF 2 WPIDS (C) 2003 THOMSON DERWENT

AN 2002-537326 [57] WPIDS

DNC C2002-152316

TI Clearing solution of disrupted material, by providing **silanized silica** matrix covalently attached to several **silane ligands**, and combining matrix with material, target nucleic acid and chaotropic salt to form a complex.

DC B04 D16

IN BITNER, R M; FLEMMING, R G; KOLLER, S C; SIMPSON, D J

PA (PROM-N) PROMEGA CORP

CYC 95

PI WO 2002038758 A1 20020516 (200257)\* EN 48p

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ  
NL OA PT SD SE SL SZ TR TZ UG ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK  
DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR  
KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU  
SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

AU 2002025942 A 20020521 (200260)

ADT WO 2002038758 A1 WO 2001-US46710 20011108; AU 2002025942 A AU 2002-25942  
20011108

FDT AU 2002025942 A Based on WO 200238758

PRAI US 2000-711782 20001113

AN 2002-537326 [57] WPIDS

AB WO 200238758 A UPAB: 20020906

NOVELTY - Clearing a solution of disrupted biological material (BM), comprising providing first **silanized silica** matrix having a silica solid phase with **silane ligands** covalently attached to it, where each ligand has neutral charge in a solution, and combining matrix with target nucleic acid, BM and chaotropic salt in the solution to promote selective adsorption of BM to matrix, to form a complex, is new.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for a kit comprising, in a single container, several **silanized silica** magnetic particles which comprises a silica solid phase with at least one silane ligand covalently attached to the surface of each particle.

USE - The method is useful for clearing a solution of a bacterial cell lysate or disrupted plant matter. The method is also useful for isolating a target nucleic acid such as plasmid DNA, genomic DNA, total RNA or a double-stranded linear DNA with a molecular weight of 25-60000 base pairs, from a nucleic acid adsorption solution (pH 8) comprising a vegetable oil at a concentration of low molecular weight alcohol sufficient to promote adsorption of the target nucleic acid to the second **silanized silica** matrix, and 0.2-1.2 M of chaotropic salt such as guanidine hydrochloride or guanidine thiocyanate. The adsorption solution comprises the target nucleic acid from an agarose gel slice and the agarose gel. The method further comprises washing the complex in a wash solution (pH 8) having a concentration of 30 % of a low molecular weight alcohol, and combining the complex with an elution solution of pH 8, especially a buffer of 9 to desorb the target nucleic acid from the complex. (All claimed). The method is also useful for isolating a target nucleic acid such as mRNA, RNA/DNA hybrids, amplified nucleic acids, non-target nucleic acids and non-target components of bacteria, animal tissue, blood cells, or other plant material from contaminants including proteins, lipids, cellular debris or non-target nucleic acids.

ADVANTAGE - The method provides efficient clearing of a solution of disrupted biological material and in isolating both low molecular weight DNA molecules (i.e. less than 150 base pairs) and larger molecular weight DNA.

Dwg.0/4

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09/711,782

>  
=> file biosis medline caplus wpids uspatfull  
COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
0.21	0.21

FULL ESTIMATED COST

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FILE 'CAPLUS' ENTERED AT 13:30:14 ON 02 JUL 2002  
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FILE 'USPATFULL' ENTERED AT 13:30:14 ON 02 JUL 2002  
CA INDEXING COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

\*\*\* YOU HAVE NEW MAIL \*\*\*

=> s clear? (2a) solution?  
L1 41995 CLEAR? (2A) SOLUTION?

=> s l1 and nucleic acid  
3 FILES SEARCHED...  
L2 1424 L1 AND NUCLEIC ACID

=> s l2 and solid phase  
L3 551 L2 AND SOLID PHASE

=> s l3 and silane  
L4 53 L3 AND SILANE

=> s l4 and silica matrix  
L5 2 L4 AND SILICA MATRIX

=> d l5 bib abs 1-2

L5 ANSWER 1 OF 2 USPATFULL  
AN 2002:3837 USPATFULL  
TI Mixed-bed **solid phase** and its use in the isolation  
of nucleic acids  
IN Smith, Craig E., Oregon, WI, UNITED STATES  
Holmes, Diana L., Crystal Lake, IL, UNITED STATES  
Simpson, Daniel J., Middleton, WI, UNITED STATES  
Katzhendler, Jehoshua, Jerusalem, ISRAEL  
Bitner, Rex M., Cedarburg, WI, UNITED STATES  
Grosch, Josephine C., Mazomainie, WI, UNITED STATES  
PA Promega Corporation., Madison, WI, UNITED STATES (U.S. corporation)  
PI US 2002001812 A1 20020103  
US 6376194 B2 20020423  
AI US 2001-912045 A1 20010724 (9)  
RLI Division of Ser. No. US 1999-312139, filed on 14 May 1999, GRANTED, Pat.  
No. US 6270970  
DT Utility  
FS APPLICATION  
LREP MICHAEL BEST & FRIEDRICH, LLP, ONE SOUTH PINCKNEY STREET, P O BOX 1806,  
MADISON, WI, 53701  
CLMN Number of Claims: 62  
ECL Exemplary Claim: 1

DRWN 3 Drawing Page(s)

LN.CNT 2532

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Mixed-bed solid phases are provided, with methods for using such solid phases to isolate target nucleic acids, such as plasmid DNA, chromosomal DNA, RNA, or nucleic acids generated by enzymatic amplification from contaminants, including proteins, lipids, cellular debris, or other nucleic acids. The mixed-bed solid phases of this invention are mixtures of at least two different solid phases, each of which has a capacity to bind to the target **nucleic acid** under different solution conditions, and the capacity to release the **nucleic acid** under similar elution conditions. By exchanging solution conditions according to the methods of this invention, one can remove contaminants from the target **nucleic acid** bound to the mixed-bed **solid phase**, then elute the target **nucleic acid** in an elution buffer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 2 OF 2 USPATFULL

AN 2001:125743 USPATFULL

TI Mixed-bed **solid phase** and its use in the isolation of nucleic acids

IN Smith, Craig E., Oregon, WI, United States  
Holmes, Diana L., Crystal Lake, IL, United States  
Simpson, Daniel J., Middleton, WI, United States  
Katzenhendler, Jehoshua, Jerusalem, IL, United States  
Bitner, Rex M., Cedarburg, WI, United States  
Grosch, Josephine C., Mazomaine, WI, United States

PA Promega Corporation, Madison, WI, United States (U.S. corporation)

PI US 6270970 B1 20010807

AI US 1999-312139 19990514 (9)

DT Utility

FS GRANTED

EXNAM Primary Examiner: Jones, W. Gary; Assistant Examiner: Chakrabarti, Arun

LREP Micheal Best & Friedrich LLP, Frenchick, Grady J., King, Karen B.

CLMN Number of Claims: 19

ECL Exemplary Claim: 1

DRWN 5 Drawing Figure(s); 3 Drawing Page(s)

LN.CNT 2302

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Mixed-bed solid phases are provided, with methods for using such solid phases to isolate target nucleic acids, such as plasmid DNA, chromosomal DNA, RNA, or nucleic acids generated by enzymatic amplification from contaminants, including proteins, lipids, cellular debris, or other nucleic acids. The mixed-bed solid phases of this invention are mixtures of at least two different solid phases, each of which has a capacity to bind to the target **nucleic acid** under different solution conditions, and the capacity to release the **nucleic acid** under similar elution conditions. By exchanging solution conditions according to the methods of this invention, one can remove contaminants from the target **nucleic acid** bound to the mixed-bed **solid phase**, then elute the target **nucleic acid** in an elution buffer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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(FILE 'HOME' ENTERED AT 13:29:45 ON 02 JUL 2002)

FILE 'BIOSIS, MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 13:30:14 ON  
02 JUL 2002

L1 41995 S CLEAR? (2A) SOLUTION?  
L2 1424 S L1 AND NUCLEIC ACID  
L3 551 S L2 AND SOLID PHASE  
L4 53 S L3 AND SILANE  
L5 2 S L4 AND SILICA MATRIX

=> s l1 and solid phase  
L6 2122 L1 AND SOLID PHASE

=> s l6 and silane  
L7 143 L6 AND SILANE

=> s l7 and silica matrix  
L8 2 L7 AND SILICA MATRIX

=> s l7 and silica  
L9 112 L7 AND SILICA

=> s l9 and chaotropic  
L10 13 L9 AND CHAOTROPIC

=> s l10 and adsorption  
L11 4 L10 AND ADSORPTION

=> s l11 not l5  
L12 2 L11 NOT L5

=> d l12 bib abs 1-2

L12 ANSWER 1 OF 2 USPATFULL  
AN 2001:191265 USPATFULL  
TI pH dependent ion exchange matrix and method of use in the isolation of  
nucleic acids  
IN Smith, Craig E., Oregon, WI, United States  
Holmes, Diana L., Crystal Lake, IL, United States  
Simpson, Daniel J., Middleton, WI, United States  
Katzenhendler, Jehoshua, Jerusalem, IL, United States  
Bitner, Rex M., Cedarburg, WI, United States  
Grosch, Josephine C., Mazomainie, WI, United States  
PA Promega Corporation, Madison, WI, United States (U.S. corporation)  
PI US 6310199 B1 20011030  
AI US 1999-312172 19990514 (9)  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Marschel, Ardin H.  
LREP Michael Best & Friedrich LLP, Frenchick, Grady J., King, Karen B.  
CLMN Number of Claims: 70  
ECL Exemplary Claim: 1  
DRWN 4 Drawing Figure(s); 4 Drawing Page(s)  
LN.CNT 2054  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB pH dependent ion exchange matrices are provided, with methods for making  
such matrices, and methods for using such matrices to isolate a target  
nucleic acid, such as plasmid DNA, chromosomal DNA, or RNA from  
contaminants, including proteins, lipids, cellular debris, or other  
nucleic acids. Each pH dependent ion exchange matrix of this invention

comprises at least two different ion exchange functional groups, one of which is capable of acting as an anion exchanger at a first pH, and the other of which is capable of acting as a cation exchanger at a second, higher pH. The matrix has an overall neutral charge in a pH range between the first and second pH. The pH dependent ion exchange matrices of the present invention are designed to bind to the target nucleic acid at a pH wherein the overall charge of the matrix is positive, and to release the target nucleic acid as the pH of the surrounding solution is increased. The target nucleic acid can be released from the pH dependent matrix in little or no salt and at about a neutral pH. The matrices and methods of this invention enable one to isolate a target nucleic acid in very few steps, without the use of hazardous chemicals. Target nucleic acids isolated using the pH dependent ion exchange matrices according to the present invention can be used immediately without further extraction or isolation.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L12 ANSWER 2 OF 2 USPATFULL  
AN 2001:134201 USPATFULL  
TI pH dependent ion exchange matrix and method of use in the isolation of nucleic acids  
IN Smith, Graig E., Oregon, WI, United States  
Holmes, Diana L., Crystal Lake, IL, United States  
Simpson, Daniel J., Middleton, WI, United States  
Katzenhendler, Jehoshua, Jerusalem, Israel  
Bitner, Rex M., Cedarburg, WI, United States  
Grosch, Josephine C., Mazomainie, WI, United States  
PA Promega Corporation, Madison, WI, United States (U.S. corporation)  
PI US 2001014650 A1 20010816  
AI US 2001-813077 A1 20010320 (9)  
RLI Division of Ser. No. US 1999-312172, filed on 14 May 1999, PENDING  
DT Utility  
FS APPLICATION  
LREP MICHAEL BEST & FRIEDRICH, LLP, ONE SOUTH PINCKNEY STREET, P O BOX 1806, MADISON, WI, 53701  
CLMN Number of Claims: 100  
ECL Exemplary Claim: 1  
DRWN 4 Drawing Page(s)  
LN.CNT 2094

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB pH dependent ion exchange matrices are provided, with methods for making such matrices, and methods for using such matrices to isolate a target nucleic acid, such as plasmid DNA, chromosomal DNA, or RNA from contaminants, including proteins, lipids, cellular debris, or other nucleic acids. Each pH dependent ion exchange matrix of this invention comprises at least two different ion exchange functional groups, one of which is capable of acting as an anion exchanger at a first pH, and the other of which is capable of acting as a cation exchanger at a second, higher pH. The matrix has an overall neutral charge in a pH range between the first and second pH. The pH dependent ion exchange matrices of the present invention are designed to bind to the target nucleic acid at a pH wherein the overall charge of the matrix is positive, and to release the target nucleic acid as the pH of the surrounding solution is increased. The target nucleic acid can be released from the pH dependent matrix in little or no salt and at about a neutral pH. The matrices and methods of this invention enable one to isolate a target nucleic acid in very few steps, without the use of hazardous chemicals. Target nucleic acids isolated using the pH dependent ion exchange matrices according to the present invention can be used immediately without further extraction or isolation.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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FILE 'BIOSIS, MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 13:30:14 ON  
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L1 41995 S CLEAR? (2A) SOLUTION?  
L2 1424 S L1 AND NUCLEIC ACID  
L3 551 S L2 AND SOLID PHASE  
L4 53 S L3 AND SILANE  
L5 2 S L4 AND SILICA MATRIX  
L6 2122 S L1 AND SOLID PHASE  
L7 143 S L6 AND SILANE  
L8 2 S L7 AND SILICA MATRIX  
L9 112 S L7 AND SILICA  
L10 13 S L9 AND CHAOTROPIC  
L11 4 S L10 AND ADSORPTION  
L12 2 S L11 NOT L5

=> s purifi? (3a) solution?

L13 18285 PURIFI? (3A) SOLUTION?

=> s l13 and solid phase

L14 1804 L13 AND SOLID PHASE

=> s l14 and silane

L15 58 L14 AND SILANE

=> s l15 and silica

L16 52 L15 AND SILICA

=> s l16 and nucleic acid

3 FILES SEARCHED...

L17 22 L16 AND NUCLEIC ACID

=> s l17 and adsorption

L18 7 L17 AND ADSORPTION

=> s l18 and chaotrop?

L19 1 L18 AND CHAOTROP?

=> d l19 bib abs

L19 ANSWER 1 OF 1 USPATFULL

AN 2002:78715 USPATFULL

TI Stanniocalcin polynucleotides, polypeptides, and methods based thereon

IN Olsen, Henrik S., Gaithersburg, MD, UNITED STATES

Zhang, Ke-Zhou, Brussels, BELGIUM

Lindsberg, Perttu, Helsinki, FINLAND

Tatlisumak, Turgut, Helsinki, FINLAND

Kaste, Markku, Vantaa, FINLAND

Andersson, Leif C., Helsinki, FINLAND

PA Human Genome Sciences, Inc., Rockville, MD, UNITED STATES, 20850 (U.S.  
corporation)

PI US 2002042372 A1 20020411

AI US 2001-840989 A1 20010425 (9)

RLI Continuation-in-part of Ser. No. WO 2000-US29432, filed on 26 Oct 2000,  
UNKNOWN

PRAI US 1999-161740P 19991027 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 47

ECL Exemplary Claim: 1  
DRWN 12 Drawing Page(s)  
LN.CNT 9559

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to human stanniocalcin (STC) polynucleotides, polypeptides, and other Stanniocalcin compositions and to novel methods based thereon. In a specific embodiment, the Stanniocalcin compositions of the invention are used to treat or protect neural cells. Moreover, the present invention relates to vectors, host cells, antibodies, and recombinant and synthetic methods for producing the Stanniocalcin compositions of the invention. Also provided are diagnostic methods for detecting or prognosing diseases, disorders, damage or injury, associated with alterations of the Stanniocalcin compositions of the invention, and to therapeutic methods for treating such diseases, disorders, damage or injury.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> s lysat? and silan? (3a) matri?

L20 6 LYSAT? AND SILAN? (3A) MATRI?

=> d l20 bib abs 1-6

L20 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2002 ACS

AN 2002:368648 CAPLUS

DN 136:364877

TI **Lysate** clearance and automated nucleic acid isolation using **silanized** magnetic silica **matrices**

IN Bitner, Rex M.; Simpson, Daniel J.; Flemming, Roderick G.; Koller, Susan C.

PA Promega Corporation, USA

SO PCT Int. Appl., 48 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002038758	A1	20020516	WO 2001-US46710	20011108
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

PRAI US 2000-711782 A 20001113

AB A method is provided for using a **silanized** silica **matrix** to isolate a target nucleic acids, such as plasmid DNA, fragments of DNA, chromosomal DNA, or RNA from contaminants, including proteins, lipids, cellular debris, or non-target nucleic acids. The **silanized** silica **matrix** comprises a silica based solid phase and a plurality of silane ligands covalently attached to the surface of the solid phase. Non-target material adsorbs to the **silanized** silica **matrix** in the presence of a sufficient concn. of chaotropic salt, while target nucleic acids adsorb to the matrix under other soln. conditions. The method of using the **silanized** silica **matrix** of the present invention can be used to clear solns. of disrupted biol. material, and to isolate nucleic acids therefrom or from other solns. contg. nucleic acids and at least one contaminant. The prepn. of MagneSil particles derivatized with 3-

glycidoxypopyltrimethoxy silane is demonstrated. Plasmid extn. from Escherichia coli cleared **lysates** prepd. using chaotropic denaturants without further addns. or using unmodified MagneSil particles and silanized MagneSil was tested. Highest yields and quality were obtained using the silanized MagneSil. Used of the silanized MagneSil.

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 2 OF 6 USPATFULL

AN 2002:152446 USPATFULL

TI Methods and formulations for mediating adeno-associated virus (AAV) attachment and infection and methods for purifying AAV

IN Samulski, Richard Jude, Chapel Hill, NC, United States

Summerford, Candace, Chapel Hill, NC, United States

PA The University of North Carolina at Chapel Hill, Chapel Hill, NC, United States (U.S. corporation)

PI US 6410300 B1 20020625

AI US 1999-228203 19990111 (9)

PRAI US 1998-71210P 19980112 (60)

DT Utility

FS GRANTED

EXNAM Primary Examiner: Priebe, Scott D.

LREP Myers Bigel Sibley & Sajovec, P.A.

CLMN Number of Claims: 48

ECL Exemplary Claim: 1,16

DRWN 18 Drawing Figure(s); 17 Drawing Page(s)

LN.CNT 2953

AB Primary receptors and co-receptors for adeno-associated virus (AAV) attachment to and infection of target cells are described. Such receptors can be used to facilitate AAV attachment to and infection of cells, e.g., for gene therapy. Methods for purification and/or concentration of AAV are also described. Methods of facilitating or enhancing AAV infection of a cell are also provided. Also described are methods of inhibiting or preventing infection of AAV into a cell. Cell samples may be screened for permissiveness for AAV attachment and infection by detecting the presence or abundance of cellular receptors that mediate attachment and/or infection of AAV into the cell. Formulations and kits for mediating AAV attachment to, and infection of, cells are also provided herein.

L20 ANSWER 3 OF 6 USPATFULL

AN 91:86794 USPATFULL

TI Affinity matrices of modified polysaccharide supports

IN Hou, Kenneth C., Glastonbury, CT, United States

Liao, Tung-Ping D., Missouri City, TX, United States

Rohan, Robert, Columbia, CT, United States

PA Cuno Inc., Meridan, CT, United States (U.S. corporation)

PI US 5059654 19911022

AI US 1989-311498 19890216 (7)

RLI Continuation-in-part of Ser. No. US 1988-154815, filed on 11 Feb 1988, now abandoned which is a continuation-in-part of Ser. No. US 1987-130186, filed on 8 Dec 1987, now abandoned which is a continuation-in-part of Ser. No. US 1987-13512, filed on 27 Jan 1987, now abandoned which is a continuation-in-part of Ser. No. US 1984-656922, filed on 2 Oct 1984, now patented, Pat. No. US 4639513 which is a continuation-in-part of Ser. No. US 1984-576448, filed on 2 Feb 1984, now patented, Pat. No. US 4663163 which is a continuation-in-part of Ser. No. US 1983-466114, filed on 14 Feb 1983, now abandoned

DT Utility

FS Granted

EXNAM Primary Examiner: Nutter, Nathan M.

CLMN Number of Claims: 28

ECL Exemplary Claim: 1  
DRWN 34 Drawing Figure(s); 14 Drawing Page(s)  
LN.CNT 3382

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention is directed to a modified polysaccharide material which comprises: (1) polysaccharide covalently bonded to a synthetic polymer; (2) the synthetic polymer being made from (a) a polymerizable compound which is capable of being covalently coupled directly or indirectly to said polysaccharide, and (b) one or more polymerizable compounds containing (i) a chemical group capable of causing the covalent coupling of the compound (b) to an affinity ligand or a biologically active molecule or (ii) a hydrophobic compound.

The invention is also directed to devices for the chromatographic separation of at least two components of a mixture comprising the modified polysaccharide material of the invention, wherein the device is configured for radial or tangential flow.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L20 ANSWER 4 OF 6 USPATFULL

AN 91:62612 USPATFULL  
TI Method for treatment of HIV-infected patients  
IN Balint, Jr., Joseph P., Seattle, WA, United States  
Jones, Frank R., Edmonds, WA, United States  
PA IMRE Corporation, Seattle, WA, United States (U.S. corporation)  
PI US 5037649 19910806  
AI US 1989-301214 19890124 (7)  
DCD 20060131  
RLI Continuation-in-part of Ser. No. US 1986-948268, filed on 31 Dec 1986, now patented, Pat. No. US 4801449 which is a continuation-in-part of Ser. No. US 1985-690781, filed on 11 Jan 1985, now patented, Pat. No. US 4681870  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Nutter, Nathan M.  
LREP Townsend and Townsend  
CLMN Number of Claims: 41  
ECL Exemplary Claim: 1  
DRWN 2 Drawing Figure(s); 2 Drawing Page(s)  
LN.CNT 834

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Patients suffering from HIV-1 infection, including both those who have and those who have not developed acquired immunodeficiency syndrome, are treated by extracorporeal removal of IgG and immune complexes. An immunoabsorbent material for removing IgG and IgG-complexes from biological fluids is prepared by covalently binding protein A to a solid-phase silica matrix. It has been found that particularly stable, high-capacity immunoabsorbents are obtained by derivatizing the silica with amino and/or carboxyl groups, and reacting the protein A with a carbodiimide at a pH in a range from 3.5 to 4.5. Binding through free hydroxyl groups may be achieved with cyanogen halides at a pH in the range from 11.0 to 11.5. After acid washing (pH 2.0-2.5) to remove non-covalently bound protein A, the immunoabsorbent may be employed in a column for therapeutic treatment of various cancers and autoimmune disorders where IgG-complexes are implicated as suppressing factors in inhibiting a normal immune response.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L20 ANSWER 5 OF 6 USPATFULL

AN 89:7415 USPATFULL  
TI Method for treatment of Kaposi's sarcoma  
IN Balint, Jr., Joseph P., Seattle, WA, United States



Jones, Frank R., Edmonds, WA, United States  
PA IMRE Corporation, Seattle, WA, United States (U.S. corporation)  
PI US 4801449 19890131  
AI US 1986-948268 19861231 (6)  
RLI Continuation-in-part of Ser. No. US 1985-690781, filed on 11 Jan 1985,  
now patented, Pat. No. US 4681870  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Kight, John; Assistant Examiner: Nutter, Nathan M.  
LREP Townsend & Townsend  
CLMN Number of Claims: 10  
ECL Exemplary Claim: 1  
DRWN 2 Drawing Figure(s); 2 Drawing Page(s)  
LN.CNT 544

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB An immunoadsorbent material for removing IgG and IgG-complexes from biological fluids is prepared by covalently binding protein A to a solid-phase silica matrix. It has been found that particularly stable, high-capacity immunoadsorbents are obtained by derivatizing the silica with amino and/or carboxyl groups, and reacting the protein A with a carbodiimide at a pH in the range from 3.5 to 4.5. Binding through free hydroxyl groups may be achieved with cyanogen halides at a pH in the range from 11.0 to 11.5. After acid washing (pH 2.0-2.5) to remove non-covalently bound protein A, the immunoadsorbent may be employed in a column for therapeutic treatment of various cancers and autoimmune disorders where IgG-complexes are implicated as suppressing factors in inhibiting a normal immune response. The column has been successfully employed in treating patients suffering from Kaposi's sarcoma.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L20 ANSWER 6 OF 6 USPATFULL

AN 87:52185 USPATFULL  
TI Protein A-silica immunoadsorbent and process for its production  
IN Balint, Jr., Joseph P., Seattle, WA, United States  
Hargreaves, Richard E., Seattle, WA, United States  
PA IMRE Corporation, Seattle, WA, United States (U.S. corporation)  
PI US 4681870 19870721  
AI US 1985-690781 19850111 (6)  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Garvin, Patrick P.  
LREP Townsend & Townsend  
CLMN Number of Claims: 26  
ECL Exemplary Claim: 1  
DRWN 2 Drawing Figure(s); 2 Drawing Page(s)  
LN.CNT 616

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB An immunoadsorbent material for removing IgG and IgG-complexes from biological fluids is prepared by covalently binding protein A to a solid-phase silica matrix. It has been found that particularly stable, high-capacity immunoadsorbents are obtained by derivatizing the silica with amino and/or carboxyl groups, and reacting the protein A with a carbodiimide at a pH in the range from 3.5 to 4.5. Binding through free hydroxyl groups may be achieved with cyanogen halides at a pH in the range from 11.0 to 11.5. After acid washing (pH 2.0-2.5) to remove non-covalently bound protein A, the immunoadsorbent may be employed in a column for therapeutic treatment of various cancers and autoimmune disorders where IgG-complexes are implicated as suppressing factors in inhibiting a normal immune response.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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FILE 'BIOSIS, MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 13:30:14 ON  
02 JUL 2002

L1 41995 S CLEAR? (2A) SOLUTION?  
L2 1424 S L1 AND NUCLEIC ACID  
L3 551 S L2 AND SOLID PHASE  
L4 53 S L3 AND SILANE  
L5 2 S L4 AND SILICA MATRIX  
L6 2122 S L1 AND SOLID PHASE  
L7 143 S L6 AND SILANE  
L8 2 S L7 AND SILICA MATRIX  
L9 112 S L7 AND SILICA  
L10 13 S L9 AND CHAOTROPIC  
L11 4 S L10 AND ADSORPTION  
L12 2 S L11 NOT L5  
L13 18285 S PURIFI? (3A) SOLUTION?  
L14 1804 S L13 AND SOLID PHASE  
L15 58 S L14 AND SILANE  
L16 52 S L15 AND SILICA  
L17 22 S L16 AND NUCLEIC ACID  
L18 7 S L17 AND ADSORPTION  
L19 1 S L18 AND CHAOTROP?  
L20 6 S LYSAT? AND SILAN? (3A) MATRI?

=> s l4 and matri?

L21 31 L4 AND MATRI?

=> s l21 and adsorption

L22 10 L21 AND ADSORPTION

=> s l22 not l5

L23 8 L22 NOT L5

=> d l23 bib abs 1-8

L23 ANSWER 1 OF 8 USPATFULL  
AN 2002:63683 USPATFULL  
TI Nanoparticles having oligonucleotides attached thereto and uses therefor  
IN Mirkin, Chad A., Wilmette, IL, United States  
Letsinger, Robert L., Wilmette, IL, United States  
Mucic, Robert C., Glendale, CA, United States  
Storhoff, James J., Evanston, IL, United States  
Elghanian, Robert, Chicago, IL, United States  
PA Nanosphere, Inc., Northbrook, IL, United States (U.S. corporation)  
PI US 6361944 B1 20020326  
AI US 1999-344667 19990625 (9)  
RLI Continuation-in-part of Ser. No. US 1999-240755, filed on 29 Jan 1999  
Continuation-in-part of Ser. No. WO 1997-US12783, filed on 21 Jul 1997  
PRAI US 1996-31809P 19960729 (60)  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Riley, Jezia  
LREP McDonnell Boehnen Hulbert & Berghoff  
CLMN Number of Claims: 12  
ECL Exemplary Claim: 1  
DRWN 58 Drawing Figure(s); 34 Drawing Page(s)  
LN.CNT 4158  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB The invention provides methods of detecting a **nucleic acid**. The methods comprise contacting the **nucleic**

**acid** with one or more types of particles having oligonucleotides attached thereto. In one embodiment of the method, the oligonucleotides are attached to nanoparticles and have sequences complementary to portions of the sequence of the **nucleic acid**. A detectable change (preferably a color change) is brought about as a result of the hybridization of the oligonucleotides on the nanoparticles to the **nucleic acid**. The invention also provides compositions and kits comprising particles. The invention further provides nanomaterials and nanostructures comprising nanoparticles and methods of nanofabrication utilizing the nanoparticles. Finally, the invention provides a method of separating a selected **nucleic acid** from other nucleic acids.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L23 ANSWER 2 OF 8 USPATFULL  
AN 2001:231041 USPATFULL  
TI Targeted diagnostic/therapeutic agents having more than one different vectors  
IN Klaveness, Jo, Olso, Norway  
Rongved, P.ang.l, Olso, Norway  
H.o slashed.gset, Anders, Olso, Norway  
Tolleshaug, Helge, Olso, Norway  
Cuthbertson, Alan, Olso, Norway  
Hoff, Lars, Olso, Norway  
Bryn, Klaus, Olso, Norway  
Hellebust, Halldis, Olso, Norway  
Solbakken, Magne, Olso, Norway  
PA Nycomed Imaging AS, Oslo, Norway (non-U.S. corporation)  
PI US 6331289 B1 20011218  
AI US 1997-959206 19971028 (8)  
PRAI GB 1996-22366 19961028  
GB 1996-22369 19961028  
GB 1997-2195 19970204  
GB 1997-8265 19970424  
GB 1997-11837 19970606  
GB 1997-11839 19970606  
US 1997-49263P 19970606 (60)  
US 1997-49266P 19970607 (60)  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Hartley, Michael G.  
LREP Bacon & Thomas  
CLMN Number of Claims: 22  
ECL Exemplary Claim: 1  
DRWN 1 Drawing Figure(s); 1 Drawing Page(s)  
LN.CNT 4091  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB Targetable diagnostic and/or therapeutically active agents, e.g. ultrasound contrast agents, comprising a suspension in an aqueous carrier liquid of a reporter comprising gas-containing or gas-generating material, said agent being capable of forming at least two types of binding pairs with a target.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L23 ANSWER 3 OF 8 USPATFULL  
AN 2001:191265 USPATFULL  
TI pH dependent ion exchange **matrix** and method of use in the isolation of nucleic acids  
IN Smith, Craig E., Oregon, WI, United States  
Holmes, Diana L., Crystal Lake, IL, United States  
Simpson, Daniel J., Middleton, WI, United States  
Katzenhendler, Jehoshua, Jerusalem, IL, United States

Bitner, Rex M., Cedarburg, WI, United States  
Grosch, Josephine C., Mazomainie, WI, United States  
PA Promega Corporation, Madison, WI, United States (U.S. corporation)  
PI US 6310199 B1 20011030  
AI US 1999-312172 19990514 (9)  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Marschel, Ardin H.  
LREP Michael Best & Friedrich LLP, Frenchick, Grady J., King, Karen B.  
CLMN Number of Claims: 70  
ECL Exemplary Claim: 1  
DRWN 4 Drawing Figure(s); 4 Drawing Page(s)  
LN.CNT 2054

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB pH dependent ion exchange **matrices** are provided, with methods for making such **matrices**, and methods for using such **matrices** to isolate a target **nucleic acid**, such as plasmid DNA, chromosomal DNA, or RNA from contaminants, including proteins, lipids, cellular debris, or other nucleic acids. Each pH dependent ion exchange **matrix** of this invention comprises at least two different ion exchange functional groups, one of which is capable of acting as an anion exchanger at a first pH, and the other of which is capable of acting as a cation exchanger at a second, higher pH. The **matrix** has an overall neutral charge in a pH range between the first and second pH. The pH dependent ion exchange **matrices** of the present invention are designed to bind to the target **nucleic acid** at a pH wherein the overall charge of the **matrix** is positive, and to release the target **nucleic acid** as the pH of the surrounding solution is increased. The target **nucleic acid** can be released from the pH dependent **matrix** in little or no salt and at about a neutral pH. The **matrices** and methods of this invention enable one to isolate a target **nucleic acid** in very few steps, without the use of hazardous chemicals. Target nucleic acids isolated using the pH dependent ion exchange **matrices** according to the present invention can be used immediately without further extraction or isolation.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L23 ANSWER 4 OF 8 USPATFULL  
AN 2001:185038 USPATFULL  
TI **Nucleic acid**-coupled colorimetric analyte detectors  
IN Charych, Deborah H., Albany, CA, United States  
Jonas, Ulrich, Mainz, Germany, Federal Republic of  
PA Regents of the University of California, Oakland, CA, United States  
(U.S. corporation)  
PI US 6306598 B1 20011023  
AI US 1999-337973 19990621 (9)  
RLI Continuation-in-part of Ser. No. US 1999-461509, filed on 14 Dec 1999  
Division of Ser. No. US 1996-592724, filed on 26 Jan 1996, now patented,  
Pat. No. US 6001556 Continuation-in-part of Ser. No. US 1993-159927,  
filed on 30 Nov 1993 Continuation-in-part of Ser. No. US 1992-976697,  
filed on 13 Nov 1992 Continuation-in-part of Ser. No. US 2000-500295,  
filed on 8 Feb 2000 Division of Ser. No. US 1997-920501, filed on 29 Aug  
1997, now patented, Pat. No. US 6022748 Continuation-in-part of Ser. No.  
US 1998-103344, filed on 23 Jun 1998 Continuation-in-part of Ser. No. US  
1996-609312, filed on 1 Mar 1996 Continuation-in-part of Ser. No. US  
1995-389475, filed on 13 Feb 1995, now abandoned Continuation-in-part of  
Ser. No. US 1994-289384, filed on 11 Aug 1994, now abandoned  
Continuation-in-part of Ser. No. US 1996-328237, filed on 24 Oct 1996,  
now abandoned Continuation-in-part of Ser. No. US 1997-944323, filed on  
8 Oct 1997 Division of Ser. No. US 1995-389475, filed on 13 Feb 1995,  
now abandoned Continuation-in-part of Ser. No. US 1994-289384, filed on

11 Aug 1994, now abandoned Continuation-in-part of Ser. No. US  
1998-23898, filed on 13 Feb 1998 Continuation-in-part of Ser. No. US  
1998-33557, filed on 2 Mar 1998

PRAI US 1998-90266P 19980622 (60)  
US 1997-50496P 19970623 (60)  
US 1997-38383P 19970214 (60)  
US 1997-39749P 19970303 (60)

DT Utility

FS GRANTED

EXNAM Primary Examiner: Riley, Jezia

LREP Medlen & Carroll, LLP

CLMN Number of Claims: 23

ECL Exemplary Claim: 1

DRWN 60 Drawing Figure(s); 53 Drawing Page(s)

LN.CNT 4877

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to methods and compositions for the direct detection of analytes and membrane conformational changes through the detection of color changes in biopolymeric materials. In particular, the present invention provide for the direct colorimetric detection of analytes using **nucleic acid** ligands at surfaces of polydiacetylene liposomes and related molecular layer systems.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L23 ANSWER 5 OF 8 USPATFULL

AN 2001:134201 USPATFULL

TI pH dependent ion exchange **matrix** and method of use in the isolation of nucleic acids

IN Smith, Graig E., Oregon, WI, United States

Holmes, Diana L., Crystal Lake, IL, United States

Simpson, Daniel J., Middleton, WI, United States

Katzenhendler, Jehoshua, Jerusalem, Israel

Bitner, Rex M., Cedarburg, WI, United States

Grosch, Josephine C., Mazomaine, WI, United States

PA Promega Corporation, Madison, WI, United States (U.S. corporation)

PI US 2001014650 A1 20010816

AI US 2001-813077 A1 20010320 (9)

RLI Division of Ser. No. US 1999-312172, filed on 14 May 1999, PENDING

DT Utility

FS APPLICATION

LREP MICHAEL BEST & FRIEDRICH, LLP, ONE SOUTH PINCKNEY STREET, P O BOX 1806,

MADISON, WI, 53701

CLMN Number of Claims: 100

ECL Exemplary Claim: 1

DRWN 4 Drawing Page(s)

LN.CNT 2094

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB pH dependent ion exchange **matrices** are provided, with methods for making such **matrices**, and methods for using such **matrices** to isolate a target **nucleic acid**, such as plasmid DNA, chromosomal DNA, or RNA from contaminants, including proteins, lipids, cellular debris, or other nucleic acids. Each pH dependent ion exchange **matrix** of this invention comprises at least two different ion exchange functional groups, one of which is capable of acting as an anion exchanger at a first pH, and the other of which is capable of acting as a cation exchanger at a second, higher pH. The **matrix** has an overall neutral charge in a pH range between the first and second pH. The pH dependent ion exchange **matrices** of the present invention are designed to bind to the target **nucleic acid** at a pH wherein the overall charge of the **matrix** is positive, and to release the target **nucleic acid** as the pH of the surrounding solution is increased. The target **nucleic acid** can be released

from the pH dependent **matrix** in little or no salt and at about a neutral pH. The **matrices** and methods of this invention enable one to isolate a target **nucleic acid** in very few steps, without the use of hazardous chemicals. Target nucleic acids isolated using the pH dependent ion exchange **matrices** according to the present invention can be used immediately without further extraction or isolation.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L23 ANSWER 6 OF 8 USPATFULL  
AN 2001:116526 USPATFULL  
TI Targeted ultrasound contrast agents  
IN Klaveness, Jo, Oslo, Norway  
Rongved, P.ang.l, Oslo, Norway  
L.o slashed.vhaug, Dagfinn, Oslo, Norway  
PA Nycomed Imaging AS, Oslo, Norway (non-U.S. corporation)  
PI US 6264917 B1 20010724  
AI US 1997-958993 19971028 (8)  
PRAI GB 1996-22366 19961028  
GB 1996-22367 19961028  
GB 1996-22368 19961028  
GB 1997-699 19970115  
GB 1997-8265 19970424  
GB 1997-11842 19970606  
GB 1997-11846 19970606  
US 1997-49264P 19970607 (60)  
US 1997-49268P 19970607 (60)  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Hartley, Michael G.  
LREP Bacon & Thomas  
CLMN Number of Claims: 17  
ECL Exemplary Claim: 1  
DRWN 2 Drawing Figure(s); 2 Drawing Page(s)  
LN.CNT 5477

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Targetable diagnostic and/or therapeutically active agents, e.g. ultrasound contrast agents, having reporters comprising gas-filled microbubbles stabilised by monolayers of film-forming surfactants, the reporter being coupled or linked to at least one vector.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L23 ANSWER 7 OF 8 USPATFULL  
AN 2001:111808 USPATFULL  
TI Diagnostic/therapeutic agents having microbubbles coupled to one or more vectors  
IN Klaveness, Jo, Oslo, Norway  
Rongved, P.ang.l, Oslo, Norway  
H.o slashed.gset, Anders, Oslo, Norway  
Tolleshaug, Helge, Oslo, Norway  
N.ae butted.vestad, Anne, Oslo, Norway  
Hellebust, Halldis, Oslo, Norway  
Hoff, Lars, Oslo, Norway  
Cuthbertson, Alan, Oslo, Norway  
L.o slashed.vhaug, Dagfinn, Oslo, Norway  
Solbakken, Magne, Oslo, Norway  
PA Nycomed Imaging AS, Oslo, Norway (non-U.S. corporation)  
PI US 6261537 B1 20010717  
AI US 1997-960054 19971029 (8)  
RLI Continuation-in-part of Ser. No. US 1997-958993, filed on 28 Oct 1997  
PRAI GB 1996-22366 19961028  
GB 1996-22367 19961028

GB 1996-22368            19961028  
 GB 1997-699              19970115  
 GB 1997-8265              19970424  
 GB 1997-11842            19970606  
 GB 1997-11846            19970606  
 US 1997-49264P            19970607 (60)  
 US 1997-49265P            19970607 (60)  
 US 1997-49268P            19970607 (60)  
 DT      Utility  
 FS      GRANTED  
 EXNAM   Primary Examiner: Hartley, Michael G.  
 LREP    Bacon & Thomas, Fichter, Richard E.  
 CLMN    Number of Claims: 22  
 ECL    Exemplary Claim: 1  
 DRWN    2 Drawing Figure(s); 2 Drawing Page(s)  
 LN.CNT 5614  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB      Targetable diagnostic and/or therapeutically active agents, e.g.  
          ultrasound contrast agents, having reporters comprising gas-filled  
          microbubbles stabilised by monolayers of film-forming surfactants, the  
          reporter being coupled or linked to at least one vector.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L23    ANSWER 8 OF 8    USPATFULL  
 AN      97:101673    USPATFULL  
 TI      Membrane affinity apparatus and purification methods related thereto  
 IN      Goffe, Randal A., Medway, MA, United States  
          Zale, Stephen E., Marlborough, MA, United States  
          O'Connor, James L., Chelmsford, MA, United States  
          Kessler, Stephen B., Princeton, MA, United States  
 PA      Hemasure Inc., Marlborough, MA, United States (U.S. corporation)  
 PI      US 5683916                      19971104  
 AI      US 1995-465479                  19950605 (8)  
 RLI    Continuation of Ser. No. US 1993-83859, filed on 28 Jun 1993, now  
          abandoned which is a continuation of Ser. No. US 1988-265061, filed on  
          31 Oct 1988, now abandoned  
 DT      Utility  
 FS      Granted  
 EXNAM   Primary Examiner: Chin, Christopher L.  
 LREP    Pennie & Edmonds LLP  
 CLMN    Number of Claims: 30  
 ECL    Exemplary Claim: 1  
 DRWN    13 Drawing Figure(s); 12 Drawing Page(s)  
 LN.CNT 2959  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB      A method and apparatus for carrying out affinity purification of a  
          ligate. The method comprising, (a) providing a ligate containing liquid  
          to a first side of at least one porous hollow fiber membrane with a  
          ligand immobilized thereto that binds and separates the ligate from the  
          liquid, (b) withdrawing a first portion of the liquid from the first  
          side of the porous hollow fiber membrane, (c) recirculating the first  
          portion of liquid to the first side of the porous hollow fiber membrane,  
          (d) repeating steps (a) to (c) until a majority of the liquid has flowed  
          through the porous hollow fiber membrane, and (e) providing an elution  
          solution to one side of the porous hollow fiber membrane under a  
          pressure sufficient to cause the elution solution to flow into and  
          through the membrane to effect disassociation of any ligate-ligand bonds  
          wherein any ligate bound to the ligand is eluted with the elution  
          solution.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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